

CHAPTER 4

POINT AND NONPOINT SOURCE CHARACTERIZATION OF THE SEQUATCHIE RIVER WATERSHED

4.1. Background.

4.2. Characterization of HUC-12 Subwatersheds

- 4.2.A. 060200040101 (Grassy Cove)
- 4.2.B. 060200040102 (Sequatchie River)
- 4.2.C. 060200040103 (Sequatchie River)
- 4.2.D. 060200040104 (Sequatchie River)
- 4.2.E. 060200040105 (Sequatchie River)
- 4.2.F. 060200040106 (Big Brush Creek)
- 4.2.G. 060200040201 (Sequatchie River)
- 4.2.H. 060200040202 (Sequatchie River)
- 4.2.I. 060200040203 (Sequatchie River)
- 4.2.J. 060200040204 (Town Creek)
- 4.2.K. 060200040301 (Little Sequatchie River, Upper)
- 4.2.L. 060200040302 (Pockett Creek)
- 4.2.M. 060200040303 (Sequatchie River, Lower)

4.1. BACKGROUND. This chapter is organized by HUC-12 subwatershed, and the description of each subwatershed is divided into four parts:

- i. General description of the subwatershed
- ii. Location of USGS (United States Geological Survey) gaging stations and STORET sites.
- iii. Location of permitted activities
- iv. Description of nonpoint source contributions

The HUC can range from 2 to 16 digits long, more digits indicating a smaller and smaller portion of the watershed is represented. The Sequatchie River Watershed (HUC 06020004) has been delineated into thirteen HUC-12 subwatersheds.

Information for this chapter was obtained from databases maintained by the Division of Water Pollution Control or provided in the WCS (Watershed Characterization System) data set. The WCS used was version 2.0 (developed by Tetra Tech, Inc for EPA Region 4) released in 2003.

WCS integrates with ArcView® v3.x and Spatial Analyst® v1.1 to analyze user-delineated (sub)watersheds based on hydrologically connected water bodies. Reports are generated by integrating WCS with Microsoft® Word. Land Use/Land Cover information from 2001 MRLC (Multi-Resolution Land Cover) data are calculated based on the proportion of county-based land use/land cover in user-delineated (sub)watersheds. Nonpoint source data in WCS are based on agricultural census data collected 1992–1998; nonpoint source data were reviewed by Tennessee NRCS staff.

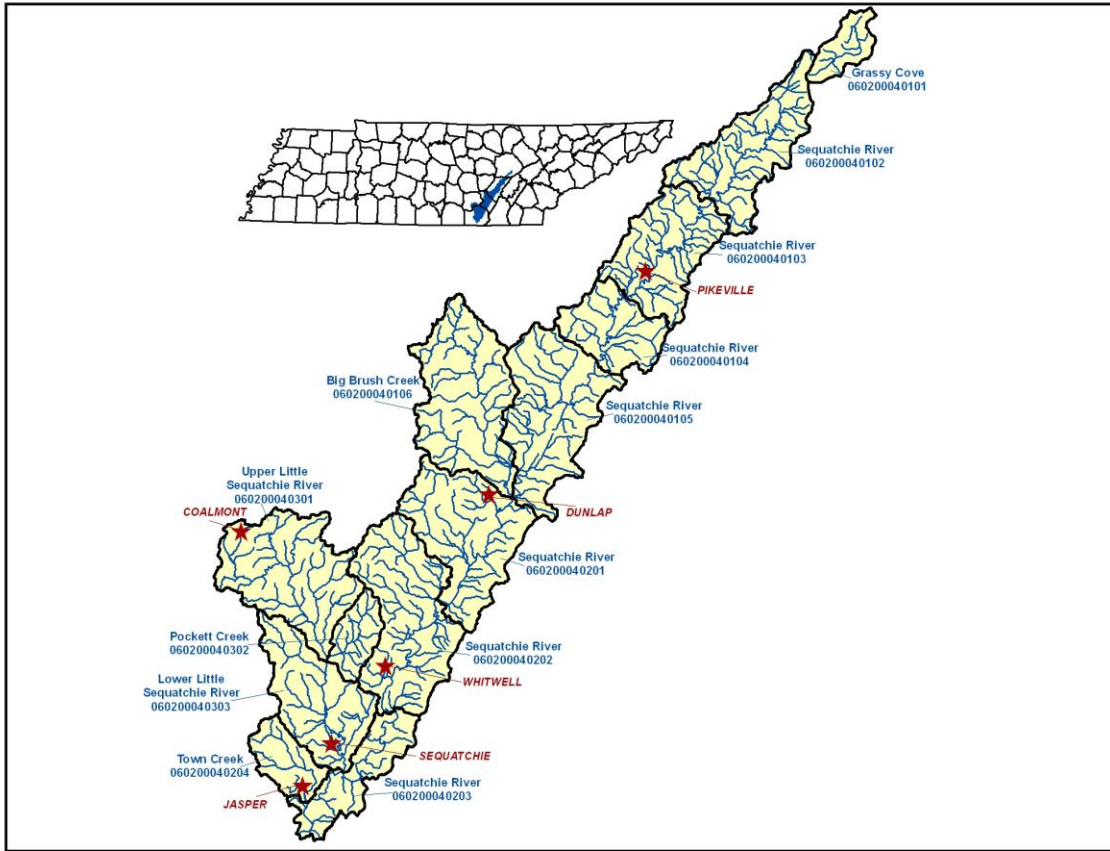


Figure 4-1. The Sequatchie River Watershed is Composed of thirteen USGS-Delineated Subwatersheds (12-Digit Subwatersheds).

4.2. CHARACTERIZATION OF HUC-12 SUBWATERSHEDS. The Watershed Characterization System (WCS) software and data sets provided by EPA Region IV were used to characterize each subwatershed in the Sequatchie River Watershed.

HUC-8	HUC-10	HUC-12
06020004	0602000401	060200040101 Grassy Cove
		060200040102 Sequatchie River
		060200040103 Sequatchie River
		060200040104 Sequatchie River
		060200040105 Sequatchie River
		060200040106 Big Brush Creek
	0602000402	060200040201 Sequatchie River
		060200040202 Sequatchie River
		060200040203 Sequatchie River
		060200040204 Town Creek
	0602000403	060200040301 Little Sequatchie River, Upper
		060200040302 Pocket Creek
		060200040303 Little Sequatchie River, Lower

Table 4-1. HUC-12 Drainage Areas are Nested Within HUC-10 Drainages. NRCS worked with USGS to delineate the HUC-10 and HUC-12 drainage boundaries.

4.2.A. 060200040101 (Grassy Cove).

4.2.A.i. General Description.

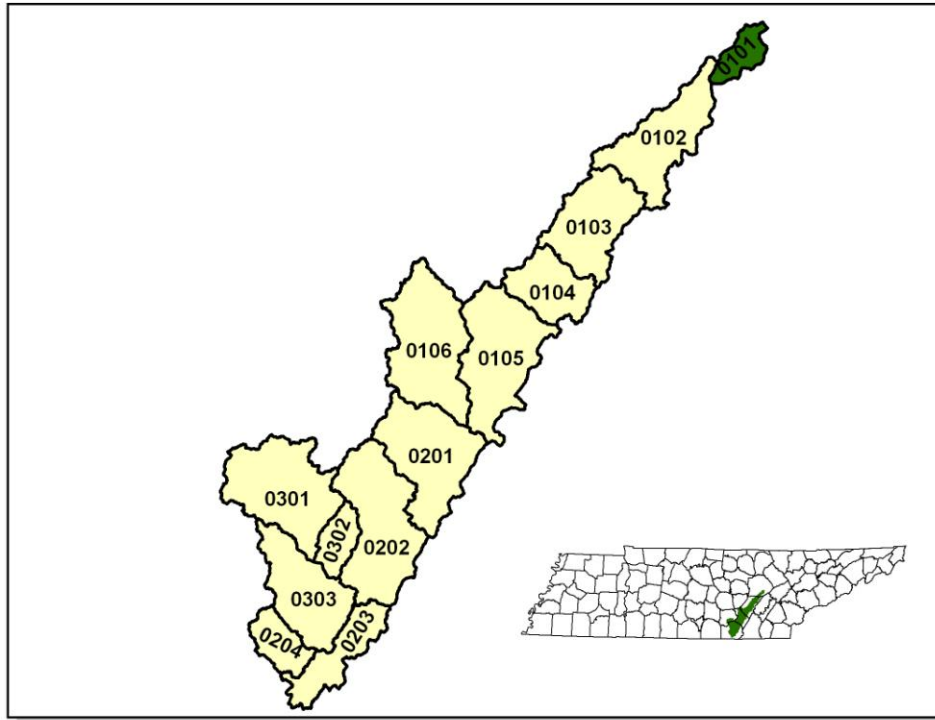


Figure 4-2. Location of Subwatershed 060200040101. All Sequatchie River HUC-12 subwatershed boundaries are shown for reference.

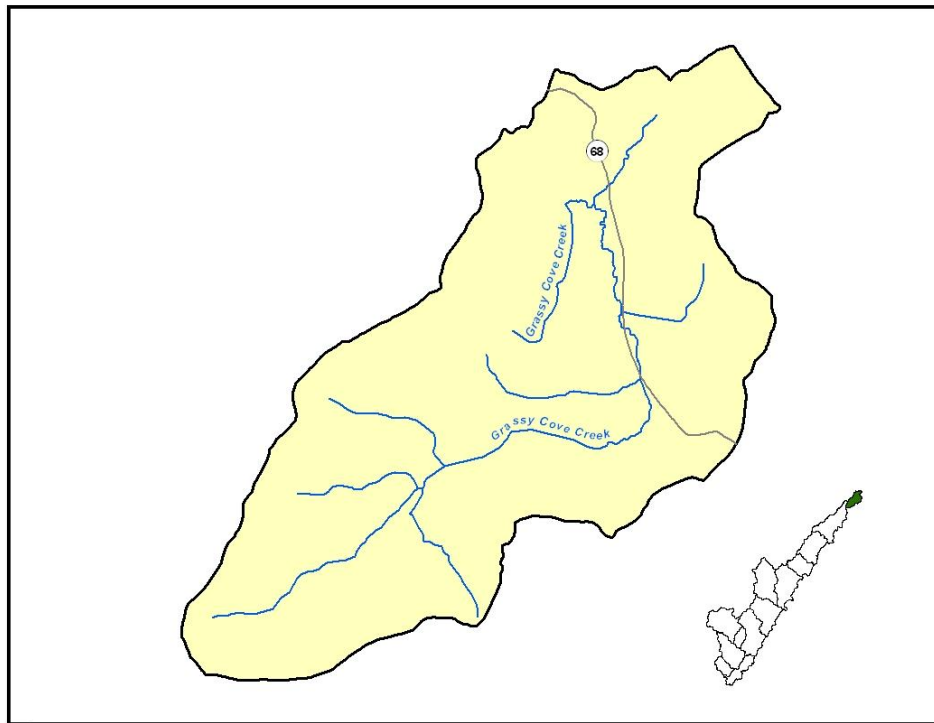


Figure 4-3. Locational Details of Subwatershed 060200040101.

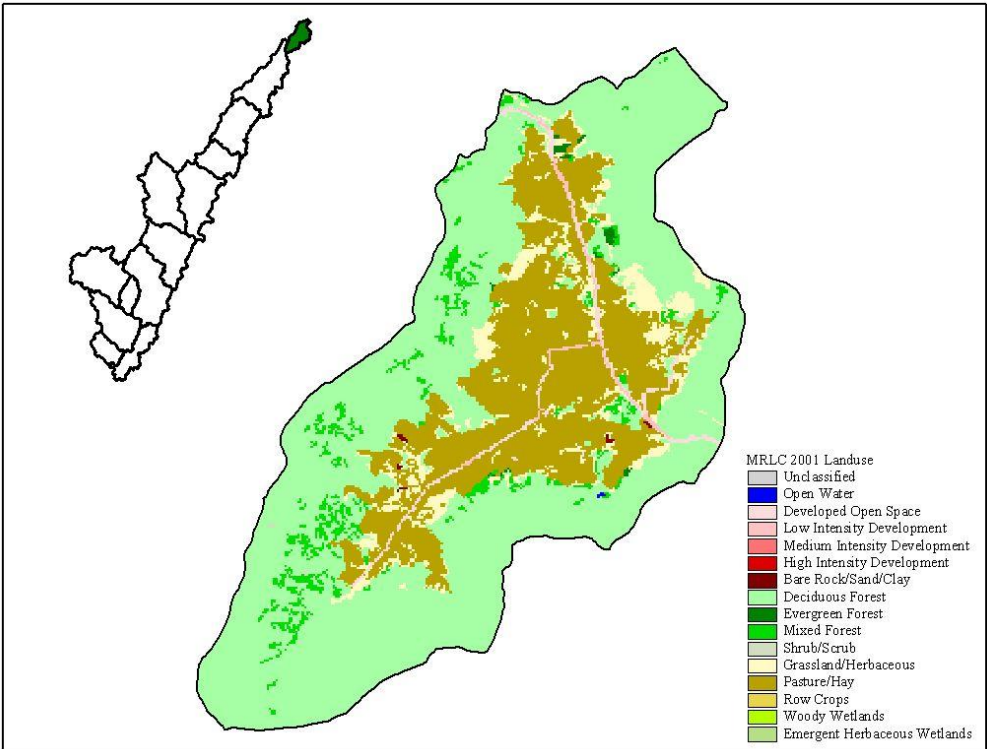


Figure 4-4. Illustration of Land Use Distribution in Subwatershed 060200040101.

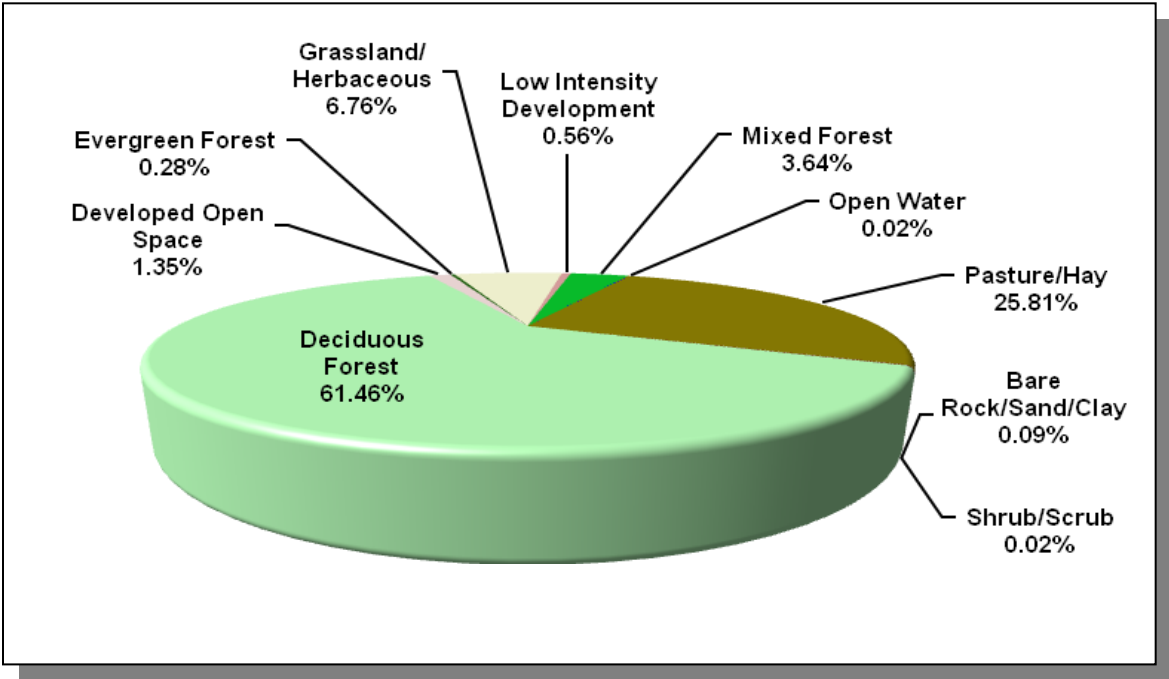


Figure 4-5. Land Use Distribution in Subwatershed 060200040101. More information is provided in Appendix IV.

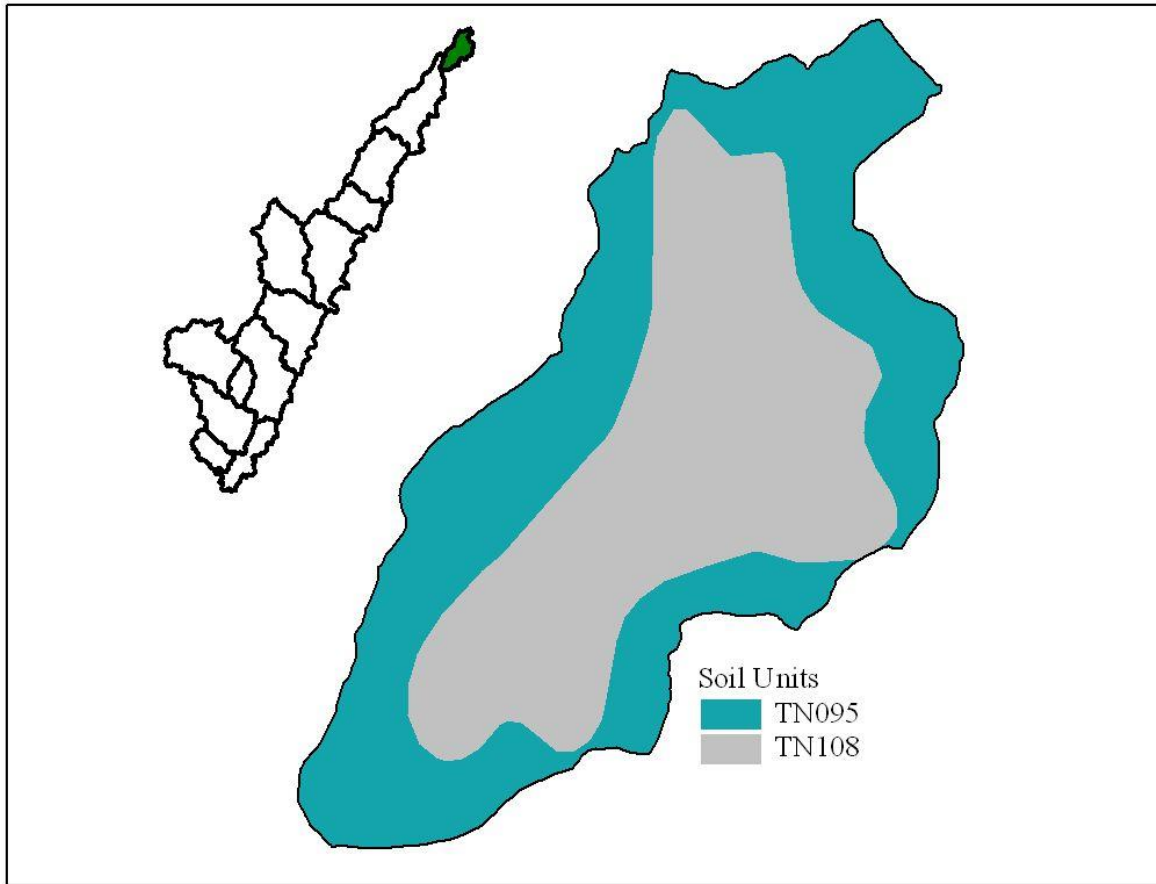


Figure 4-6. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040101.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	B	2.35	5.12	Loam	0.31
TN108	9.00	C	2.46	4.93	Loam	0.31

Table 4-2. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040101. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION				ESTIMATED POPULATION IN WATERSHED			
County	1990	1997	2000	% of County in Watershed	1990	1997	2000	% Change (1990-2000)
Cumberland	34,736	43,217	46,802	1.96	682	848	918	34.60

Table 4-3. Population Estimates in Subwatershed 060200040101.

4.2.A.ii USGS Gaging Stations and STORET Sites.

There are no USGS continuous records gaging stations located in subwatershed 060200040101.

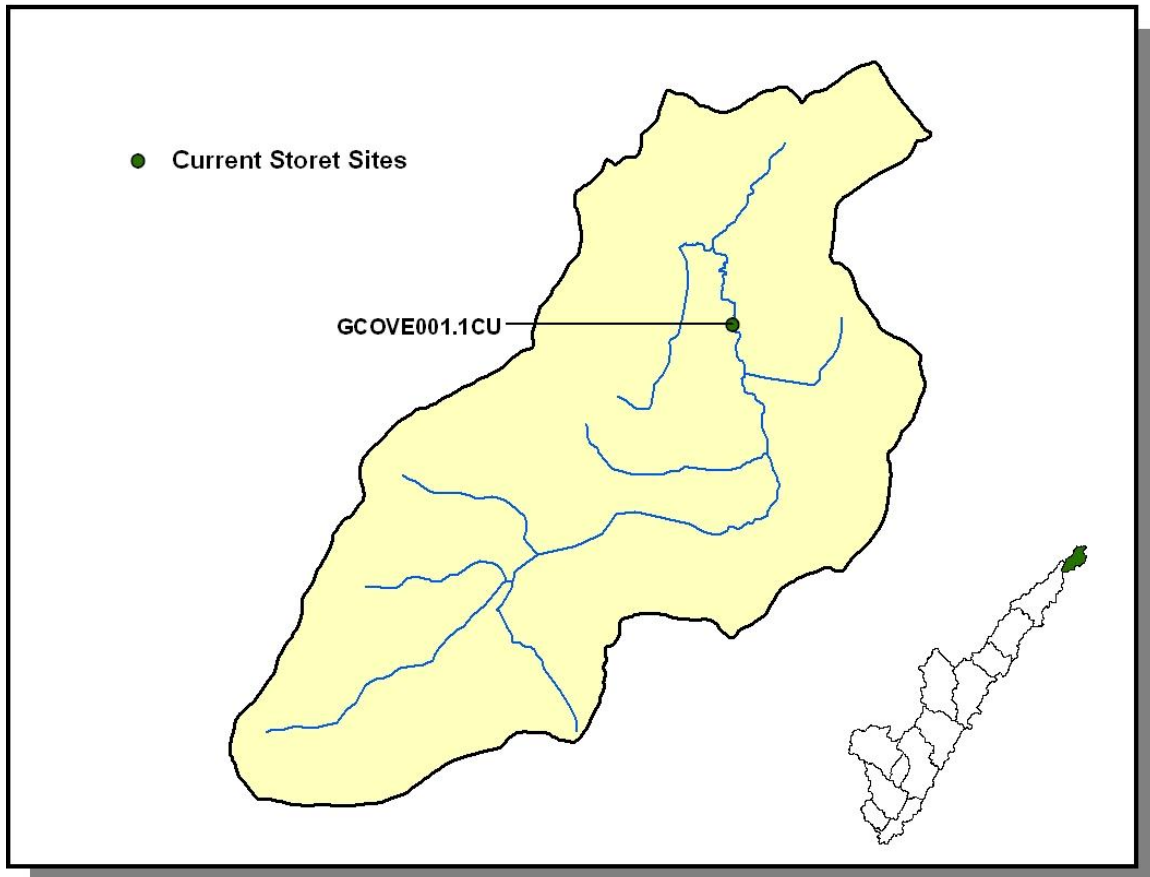


Figure 4-7. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060200040101. More information, including site names and locations, is provided in Appendix IV.

4.2.A.iii. Permitted Activities.

There are no permitted activities located in subwatershed 060200040101 as of June 30th, 2007.

4.2.A.iv. Nonpoint Source Contributions.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Cumberland	9,468	23,179	2,296	43	6,038	461

Table 4-4. Summary of Livestock Count Estimates by County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

CROPS	TONS/ACRE/YEAR
Other Vegetable and Truck Crop	14.05
Soybeans (Row Crops)	6.26
Corn (Row Crops)	3.77
Grass (Hayland)	3.05
Grass (Pastureland)	0.40
Grass Forbs Legumes Mixed (Pastureland)	0.26
Farmsteads and Ranch Headquarters	0.23
Legume Grass (Hayland)	0.16
Legume (Pastureland)	0.15

Table 4-5. Annual Estimated Total Soil Loss in Subwatershed 060200040101.

4.2.B. 060200040102 (Sequatchie River).

4.2.B.i. General Description.

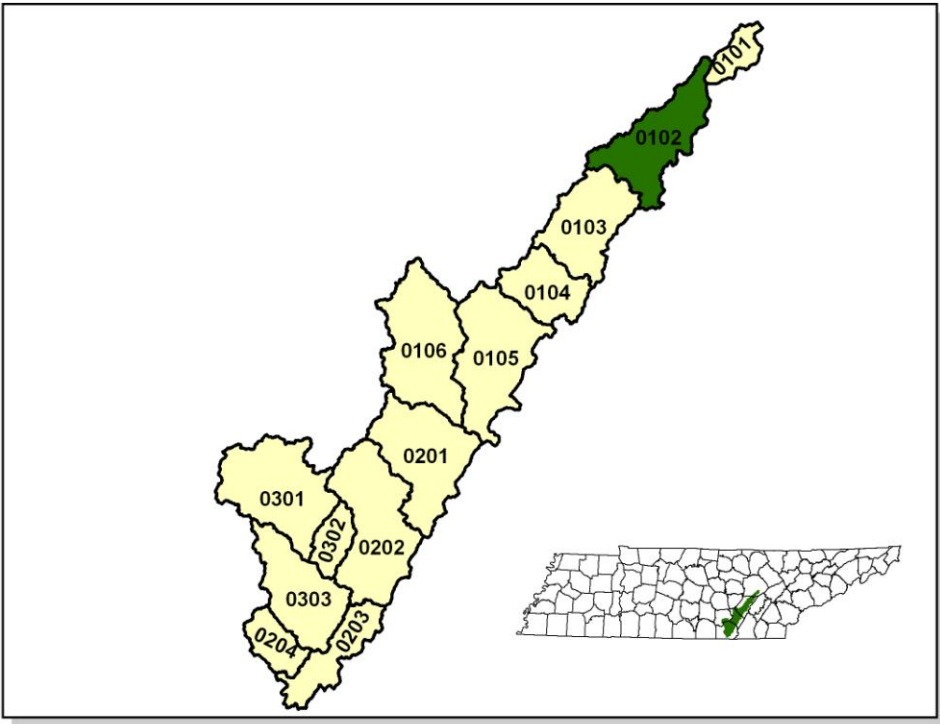


Figure 4-8. Location of Subwatershed 060200040102. All Sequatchie River HUC-12 subwatershed boundaries are shown for reference.

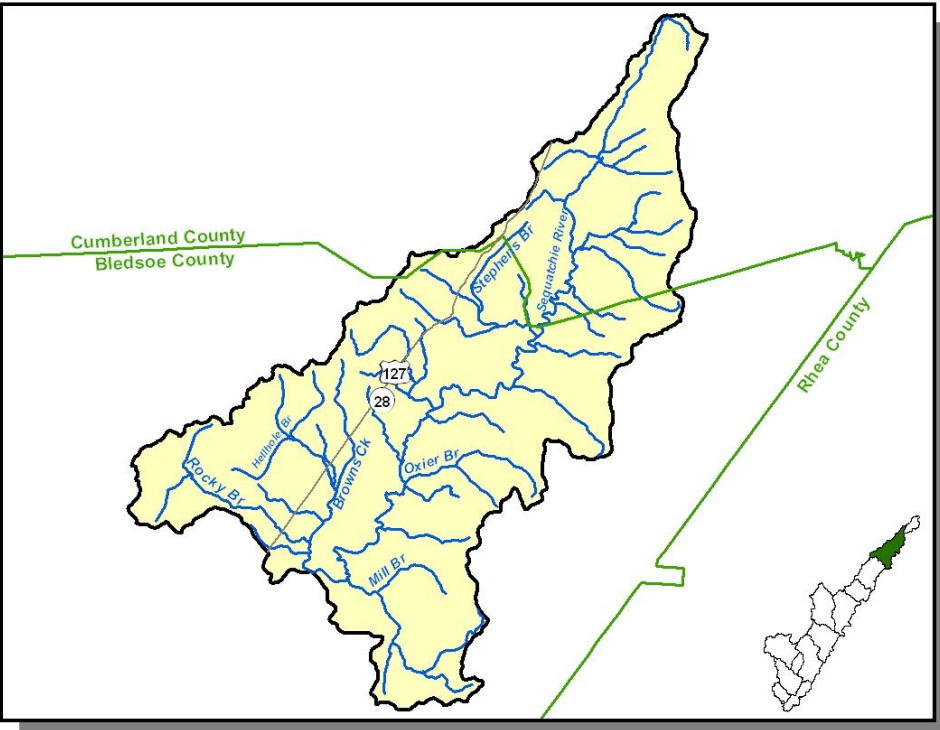


Figure 4-9. Locational Details of Subwatershed 060200040102.

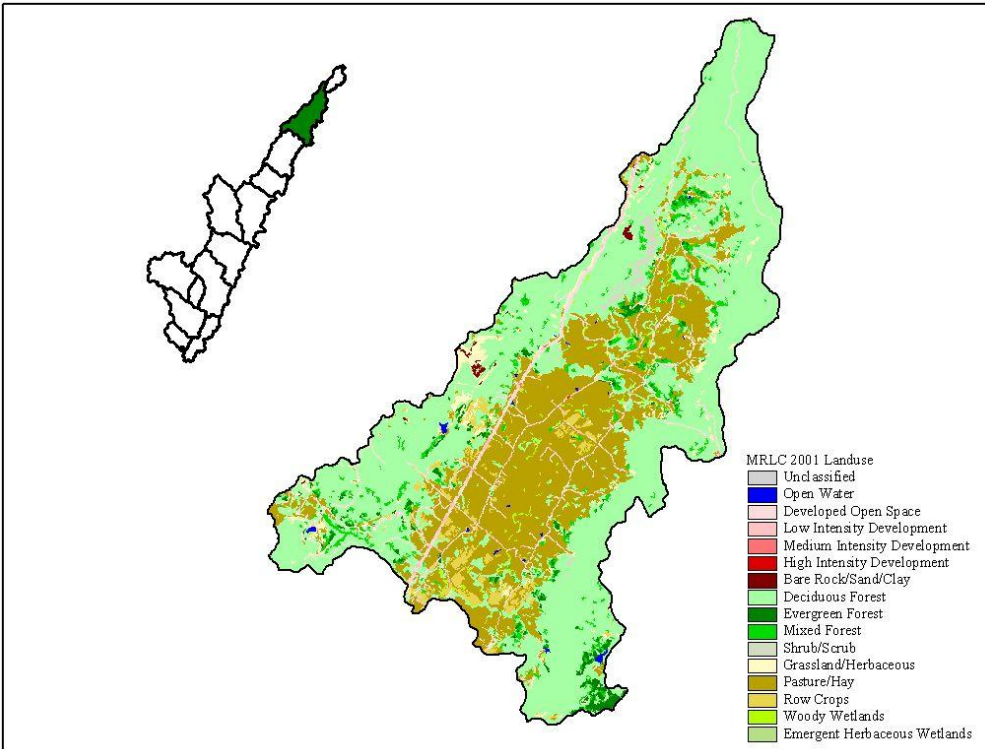


Figure 4-10. Illustration of Land Use Distribution in Subwatershed 060200040102.

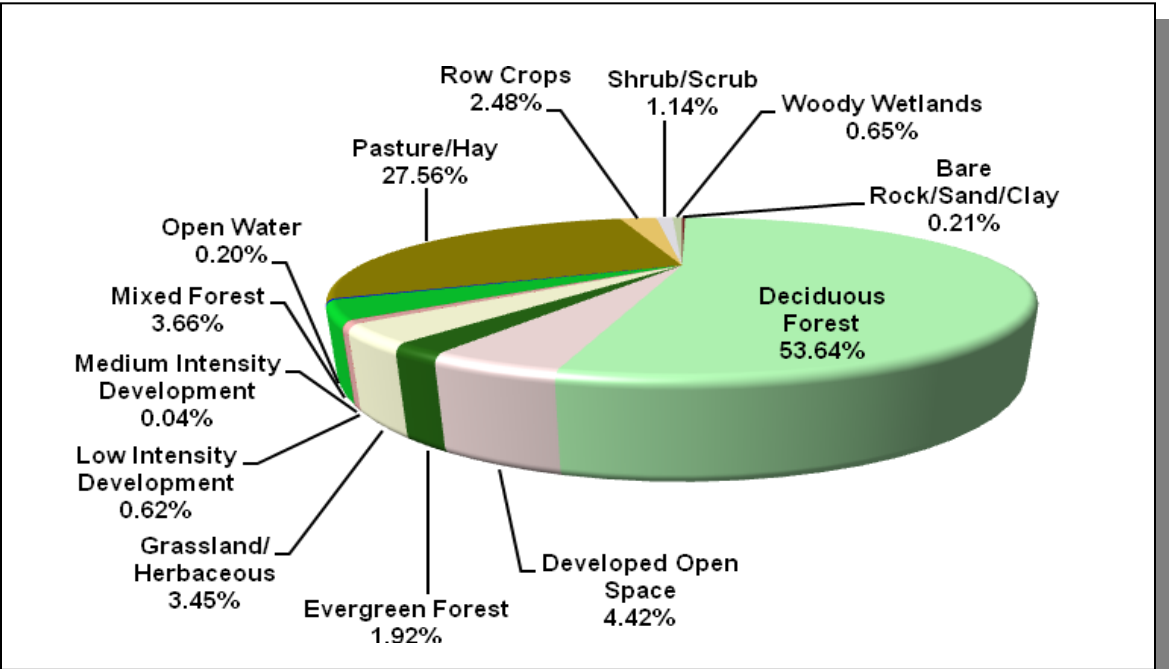


Figure 4-11. Land Use Distribution in Subwatershed 060200040102. More information is provided in Appendix IV.

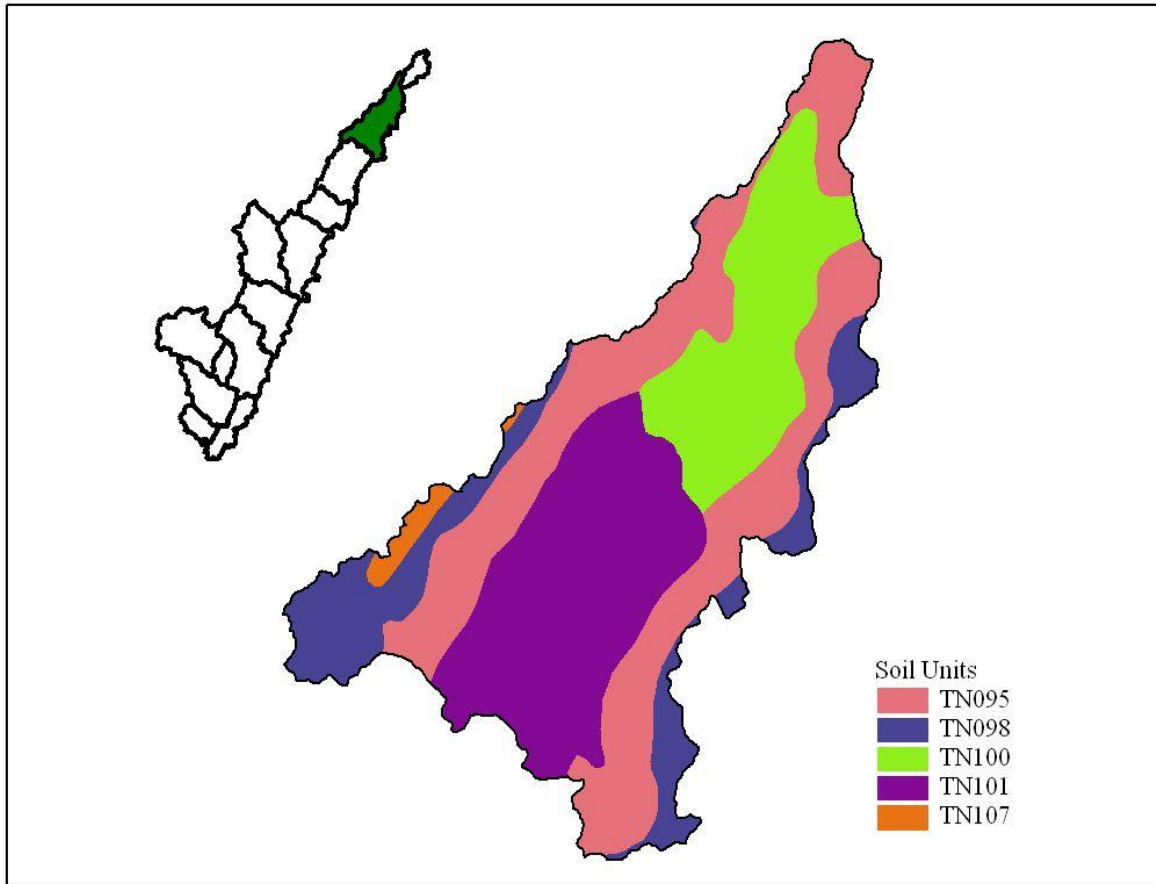


Figure 4-12. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040102.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	B	2.35	5.12	Loam	0.31
TN098	1.00	C	3.98	4.82	Loam	0.32
TN100	0.00	B	1.14	3.35	Silty Loam	0.21
TN101	0.00	B	1.71	5.39	Loam	0.35
TN107	1.00	C	6.34	4.84	Loam	0.28

Table 4-6. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040102. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			% of County in Watershed	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Bledsoe	9,669	10,650	12,367	10.27	993	1,094	1,271	28.00
Cumberland	34,736	43,217	46,802	1.65	573	713	772	34.70
Totals	44,405	53,867	59,169		1,566	1,807	2,043	30.50

Table 4-7. Population Estimates in Subwatershed 060200040102.

4.2.B.ii USGS Gaging Stations and STORET Sites.

There are no USGS continuous records gaging stations located in subwatershed 060200040102.

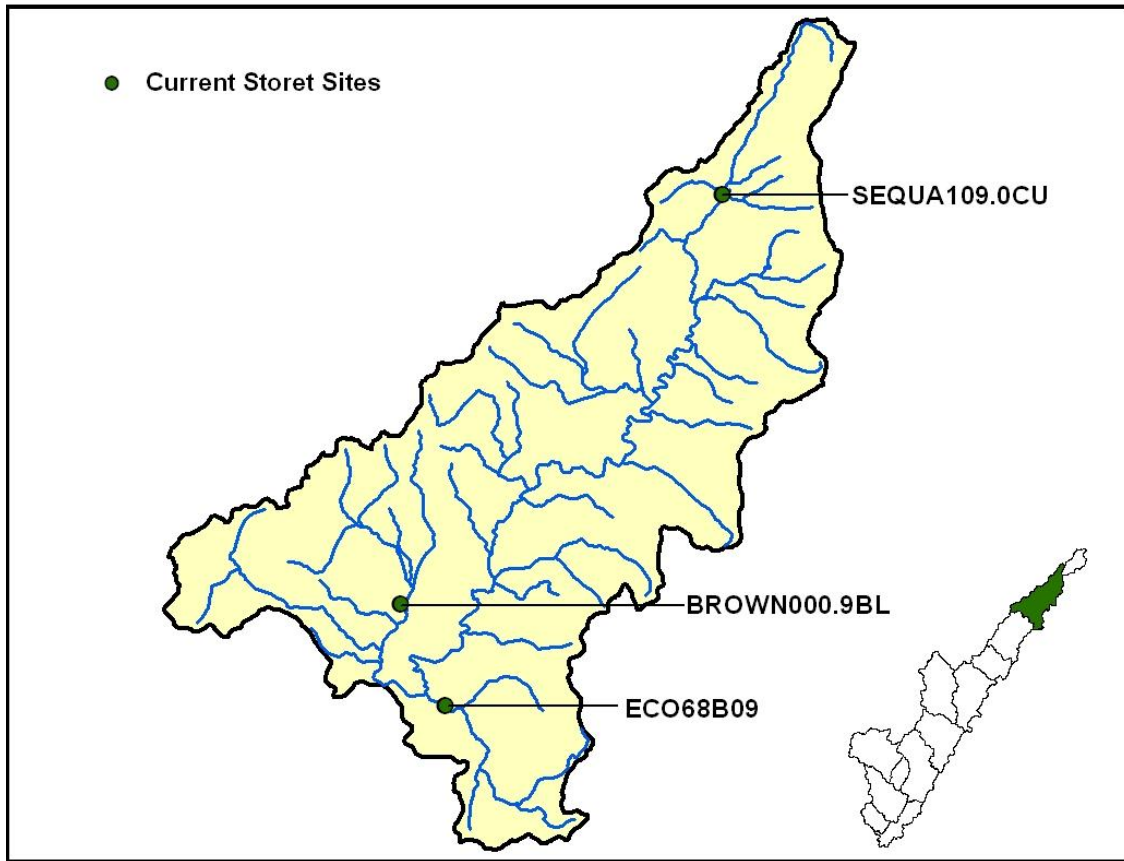


Figure 4-13. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060200040102. More information, including site names and locations, is provided in Appendix IV.

4.2.B.iii. Permitted Activities.

There are no permitted activities located in subwatershed 060200040102 as of June 30th, 2007.

4.2.B.iv. Nonpoint Source Contributions.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Bledsoe	11,691	25,110	1,474	22	275	162
Cumberland	9,468	23,179	2,296	43	6,038	461

Table 4-8. Summary of Livestock Count Estimates by County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Bledsoe	186.2	186.2	0.9	2.3

Table 4-9. Forest Acreage and Annual Removal Rates (1987-1994) by County.

CROPS	TONS/ACRE/YEAR
Other Vegetable and Truck Crop	14.05
Corn (Row Crops)	9.64
Soybeans (Row Crops)	5.15
All Other Row Crops	4.45
Wheat (Close Grown Cropland)	2.81
Conservation Reserve Program Land	1.00
Farmsteads and Ranch Headquarters	0.99
Legume Grass (Hayland)	0.95
Grass (Hayland)	0.78
Grass (Pastureland)	0.62
Grass Forbs Legumes Mixed (Pastureland)	0.48
Legume (Pastureland)	0.15

Table 4-10. Annual Estimated Total Soil Loss in Subwatershed 060200040102.

4.2.C. 060200040103 (Sequatchie River).

4.2.C.i. General Description.

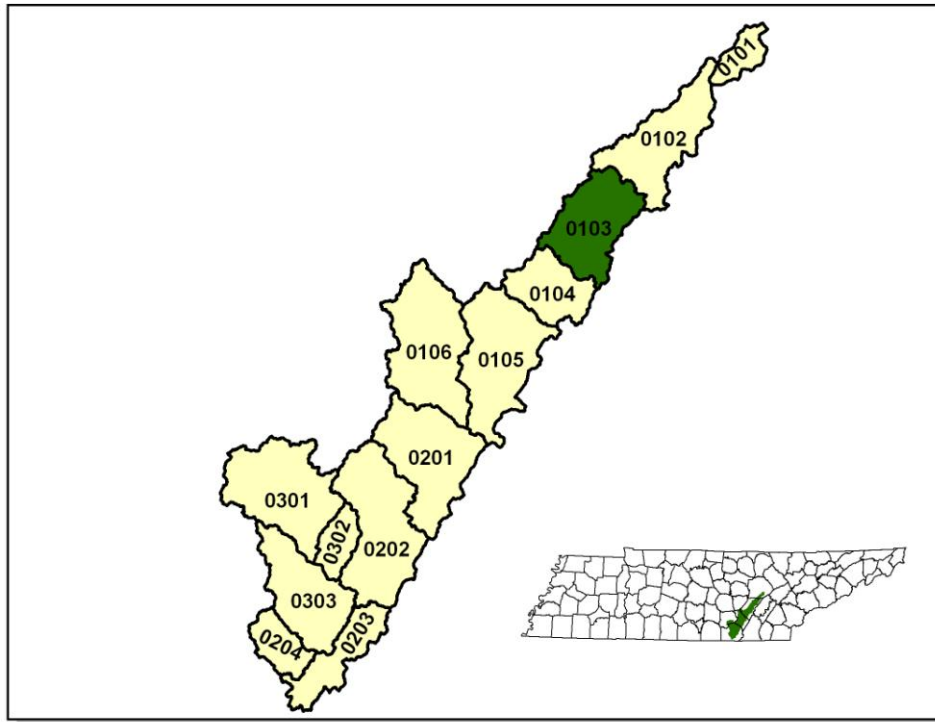


Figure 4-14. Location of Subwatershed 060200040103. All Sequatchie River HUC-12 subwatershed boundaries are shown for reference.

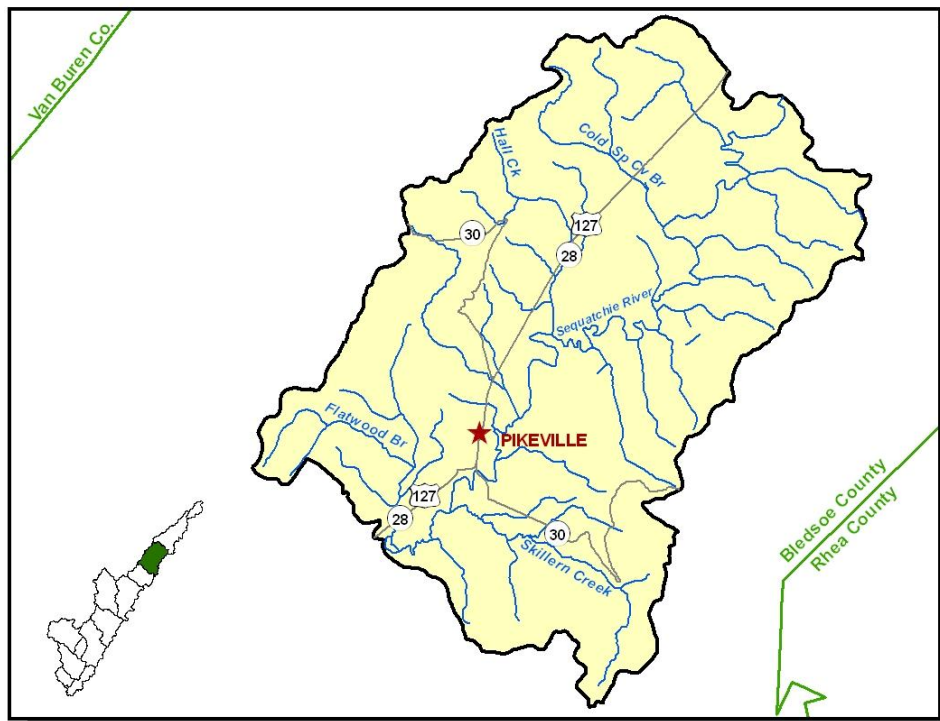


Figure 4-15. Locational Details of Subwatershed 060200040103.

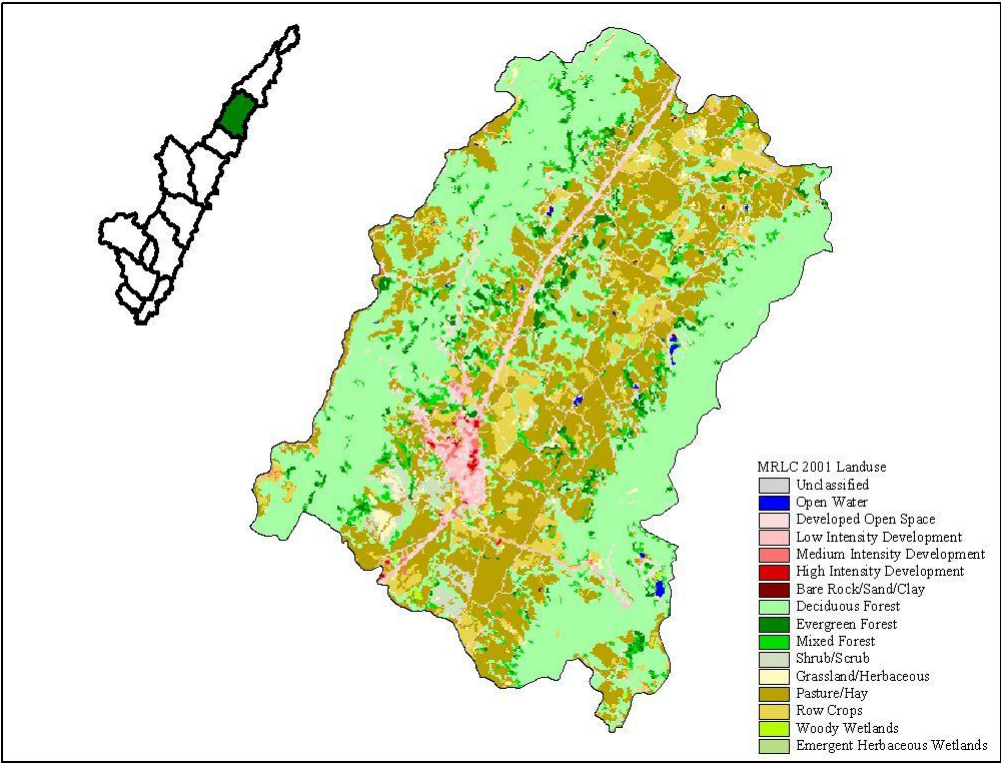


Figure 4-16. Illustration of Land Use Distribution in Subwatershed 060200040103.

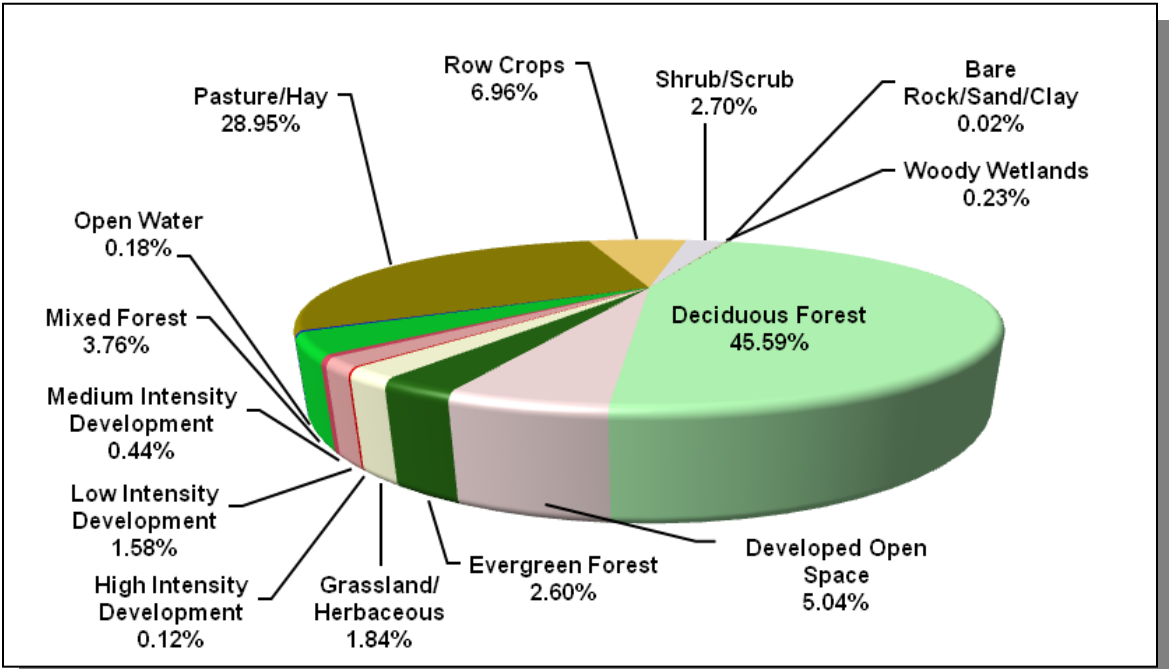


Figure 4-17. Land Use Distribution in Subwatershed 060200040103. More information is provided in Appendix IV.

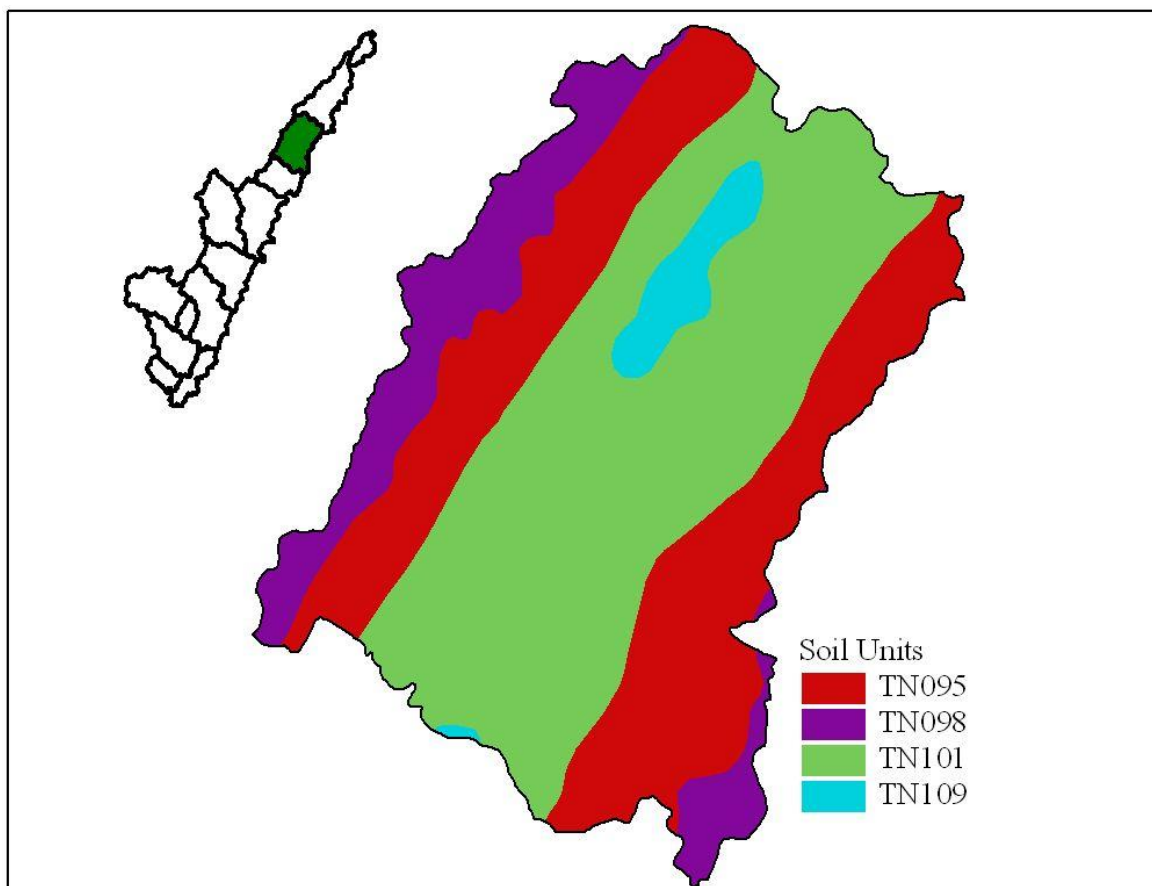


Figure 4-18. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040103.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	B	2.35	5.12	Loam	0.31
TN098	1.00	C	3.98	4.82	Loam	0.32
TN101	0.00	B	1.71	5.39	Loam	0.35
TN109	0.00	B	8.40	5.01	Sandy Loam	0.28

Table 4-11. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040103. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			% of County in Watershed	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Bledsoe	9,669	10,650	12,367	12.33	1,192	1,313	1,525	27.90

Table 4-12. Population Estimates in Subwatershed 060200040103.

			NUMBER OF HOUSING UNITS			
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Pikeville	Bledsoe	1,771	802	640	162	0

Table 4-13. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 060200040103.

4.2.C.ii USGS Gaging Stations and STORET Sites.

There are no USGS continuous records gaging stations located in subwatershed 060200040103.

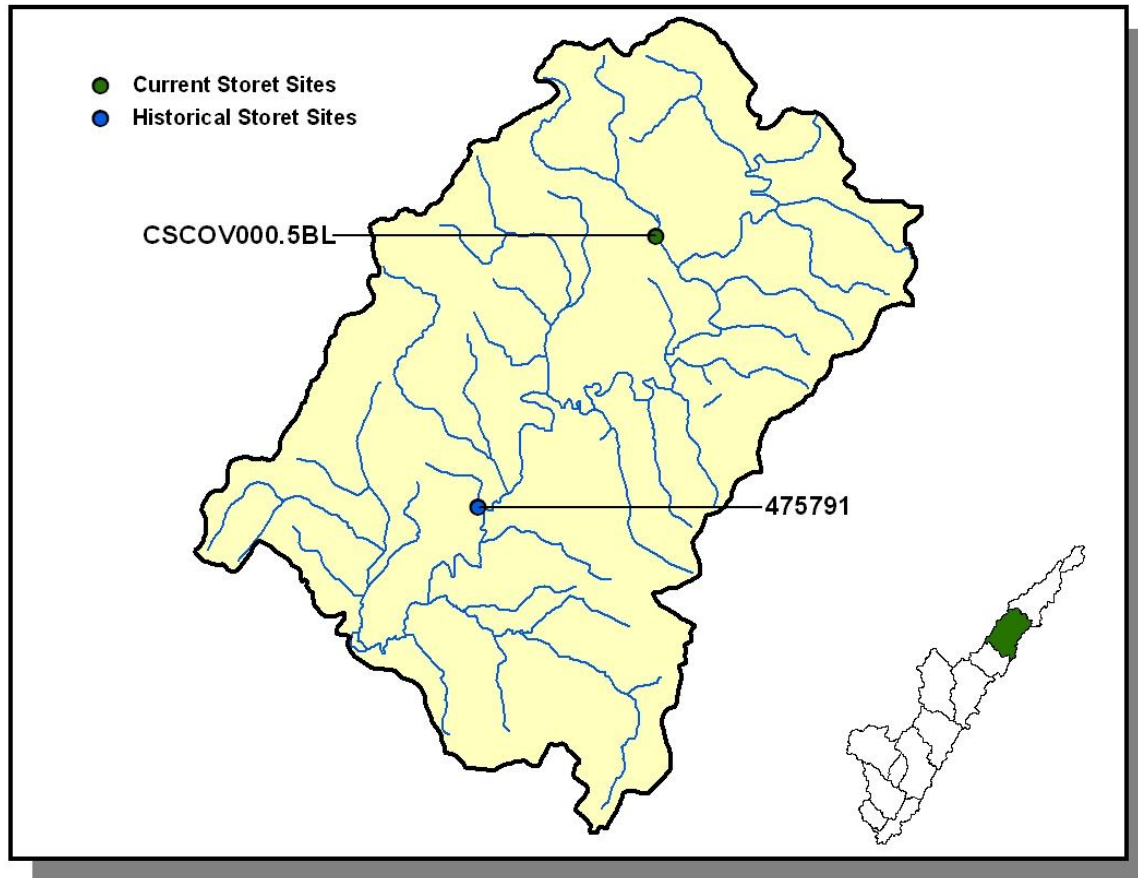


Figure 4-19. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060200040103. More information, including site names and locations, is provided in Appendix IV.

4.2.C.iii. Permitted Activities.

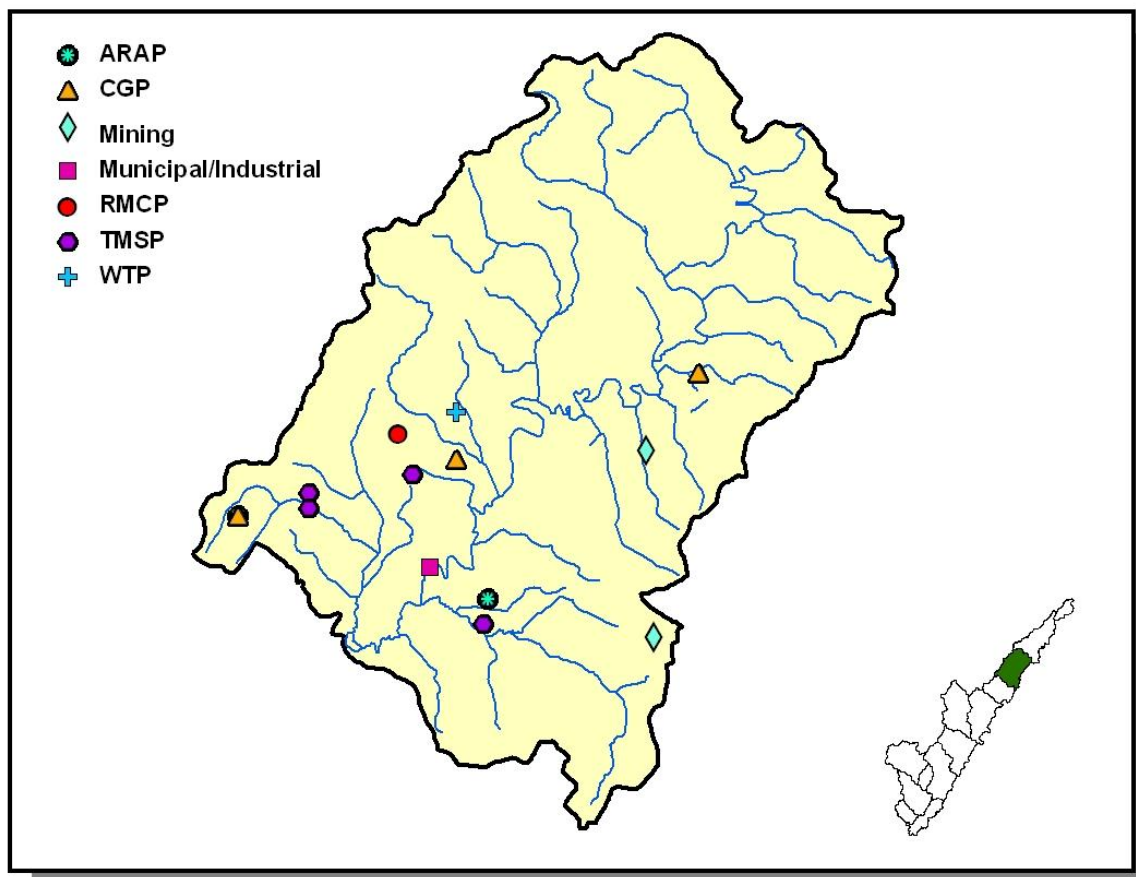


Figure 4-20. Location of Permits Issued in Subwatershed 060200040103. More information, including the names of facilities, is provided in Appendix IV.

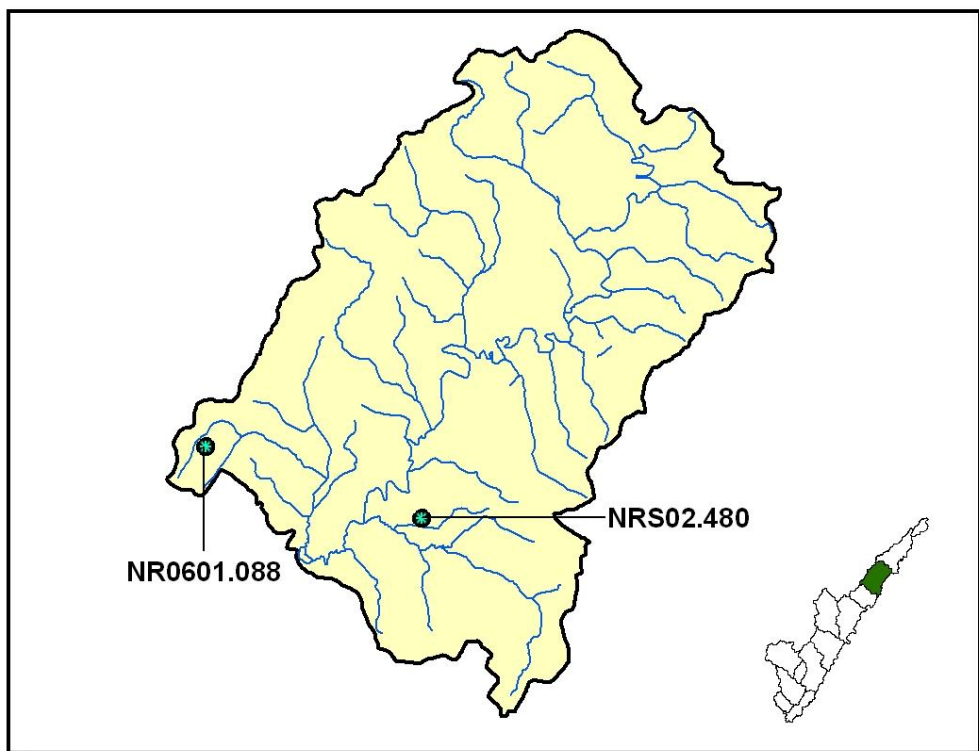


Figure 4-21. Location of ARAP (Aquatic Resource Alteration Permit) Sites in Subwatershed 060300010103. More information is provided in Appendix IV.

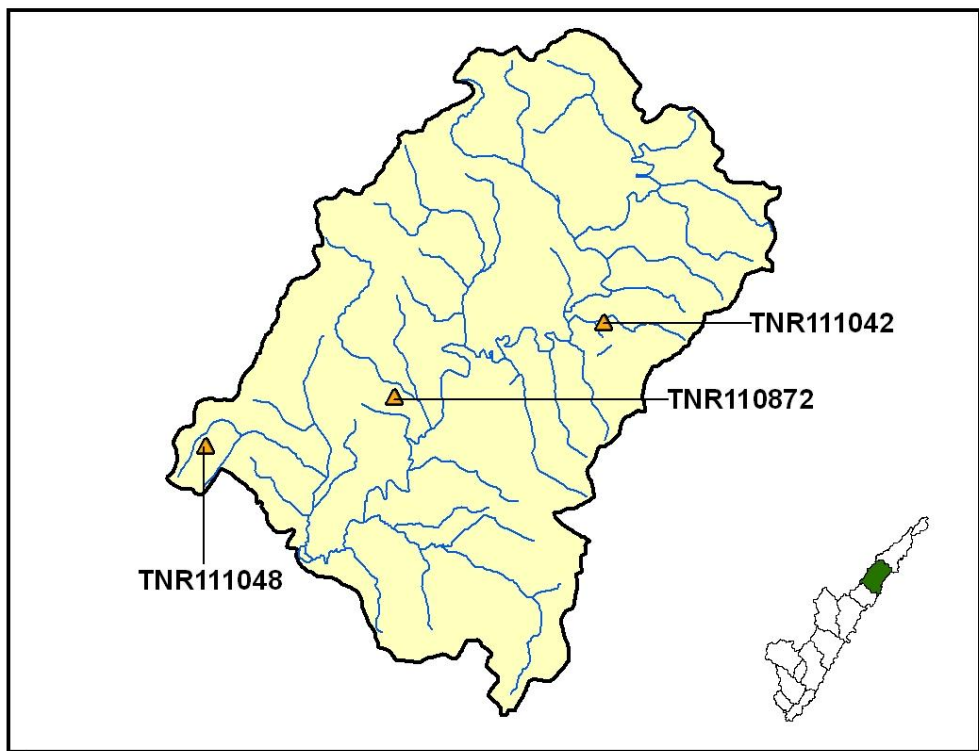


Figure 4-22. Location of CGP (Construction General Permit) Sites in Subwatershed 060300010103. More information is provided in Appendix IV.

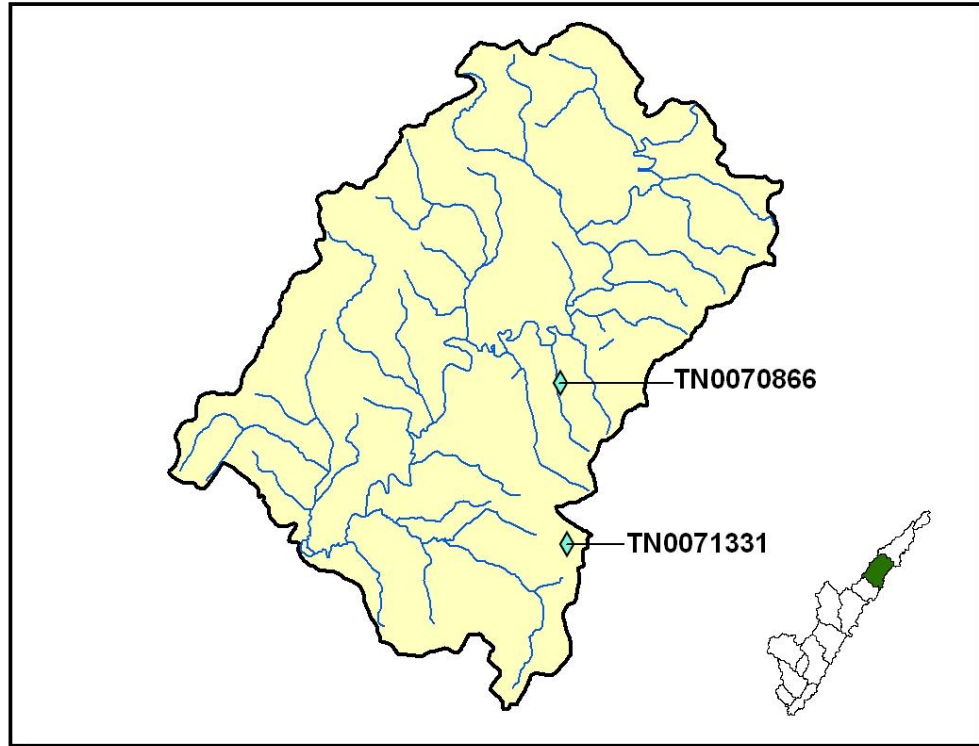


Figure 4-23. Location of Permitted Mining Facilities in Subwatershed 060300010103. More information is provided in Appendix IV.

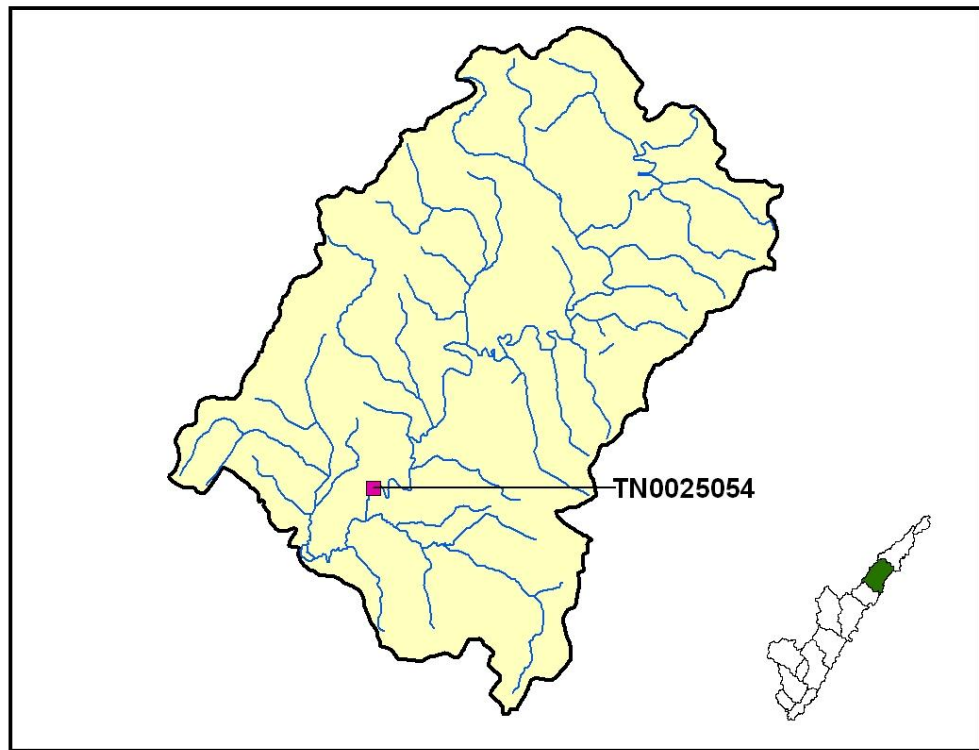


Figure 4-24. Location of Permitted Municipal and Industrial Facilities in Subwatershed 060300010103. More information, including the name of the facility is provided in Appendix IV.



Figure 4-25. Location of RMCP (Ready Mix Concrete Plant) facilities in Subwatershed 060300010103. More information, including the names of facilities, is provided in Appendix IV.

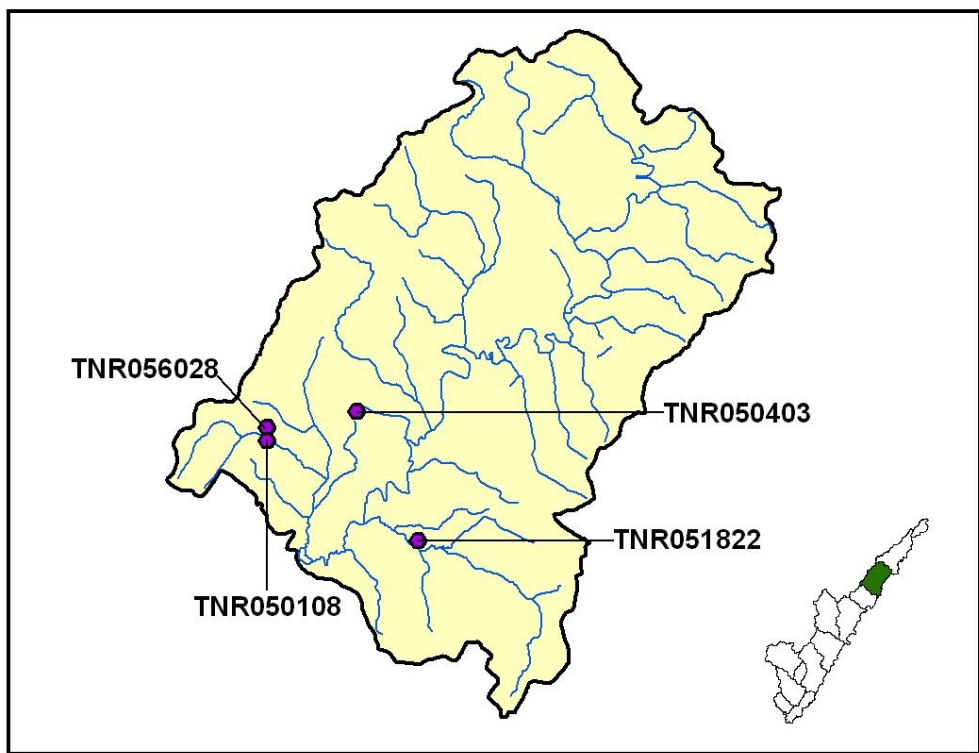


Figure 4-26. Location of TMSP (Tennessee Multi Sector Permit) Sites in Subwatershed 060300010103. More information is provided in Appendix IV.

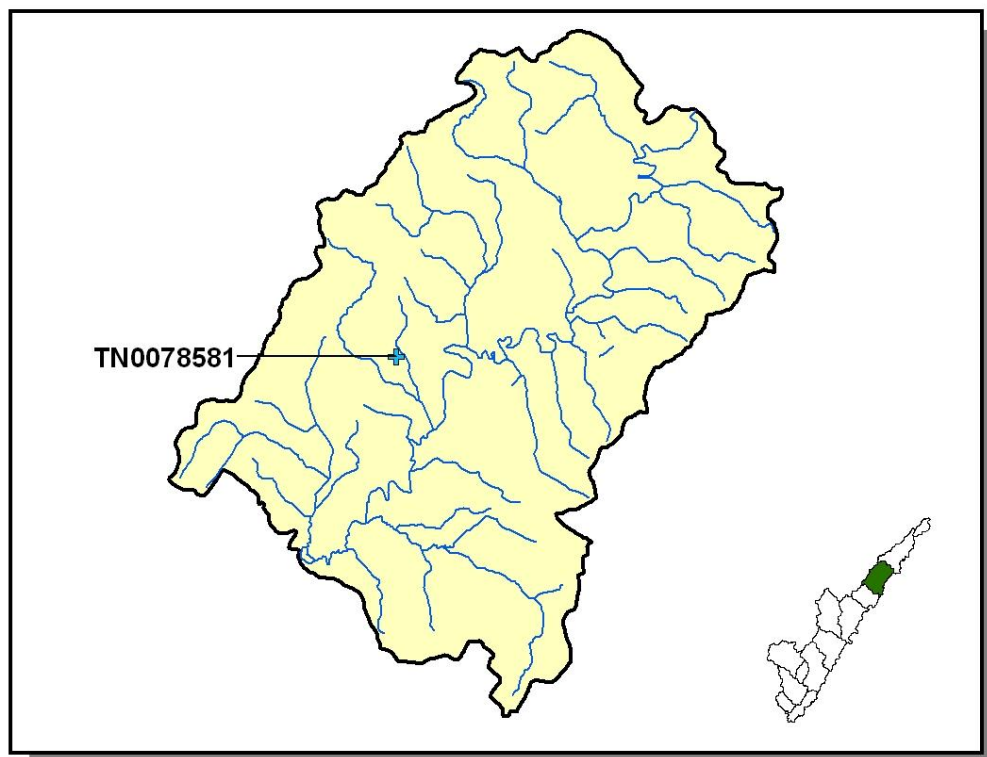


Figure 4-27. Location of Active WTP Facilities in Subwatershed 060300010103. More information, including the names of facilities, is provided in Appendix IV.

4.2.C.iv. Nonpoint Source Contributions.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Bledsoe	11,691	25,110	1,474	22	275	162

Table 4-14. Summary of Livestock Count Estimates by County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Bledsoe	186.2	186.2	0.9	2.3

Table 4-15. Forest Acreage and Annual Removal Rates (1987-1994) by County.

CROPS	TONS/ACRE/YEAR
Corn (Row Crops)	11.22
Soybeans (Row Crops)	4.85
All Other Row Crops	4.45
Wheat (Close Grown Cropland)	2.81
Farmsteads and Ranch Headquarters	1.19
Legume Grass (Hayland)	1.16
Conservation Reserve Program Land	1.00
Grass (Pastureland)	0.68
Grass Forbs Legumes Mixed (Pastureland)	0.54
Grass (Hayland)	0.17

Table 4-16. Annual Estimated Total Soil Loss in Subwatershed 060200040103.

4.2.D. 060200040104 (Sequatchie River).

4.2.D.i. General Description.

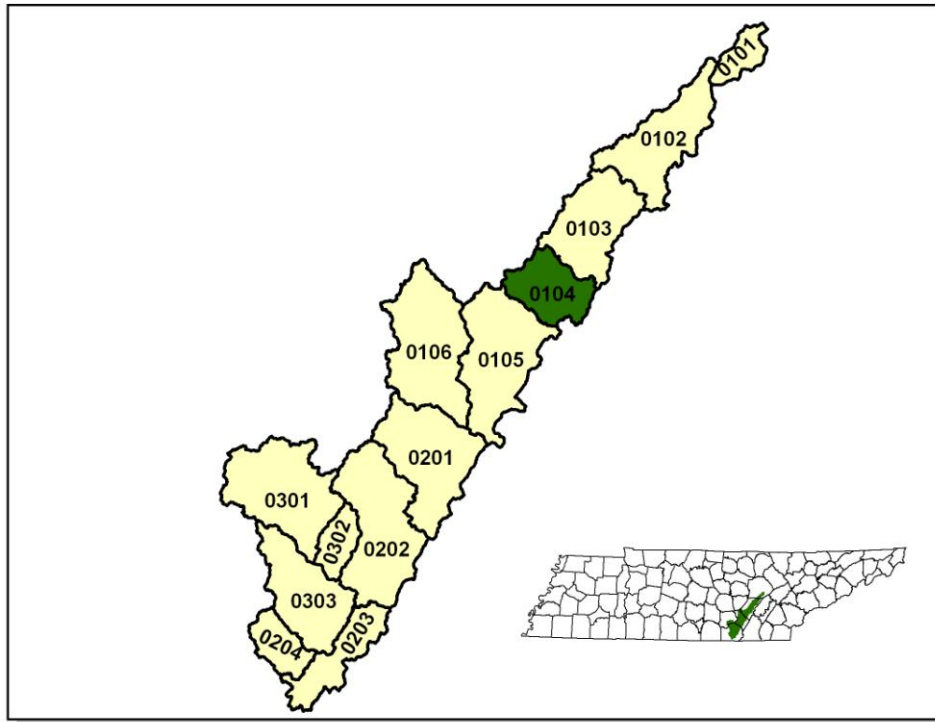


Figure 4-28. Location of Subwatershed 060200040104. All Sequatchie River HUC-12 subwatershed boundaries are shown for reference.

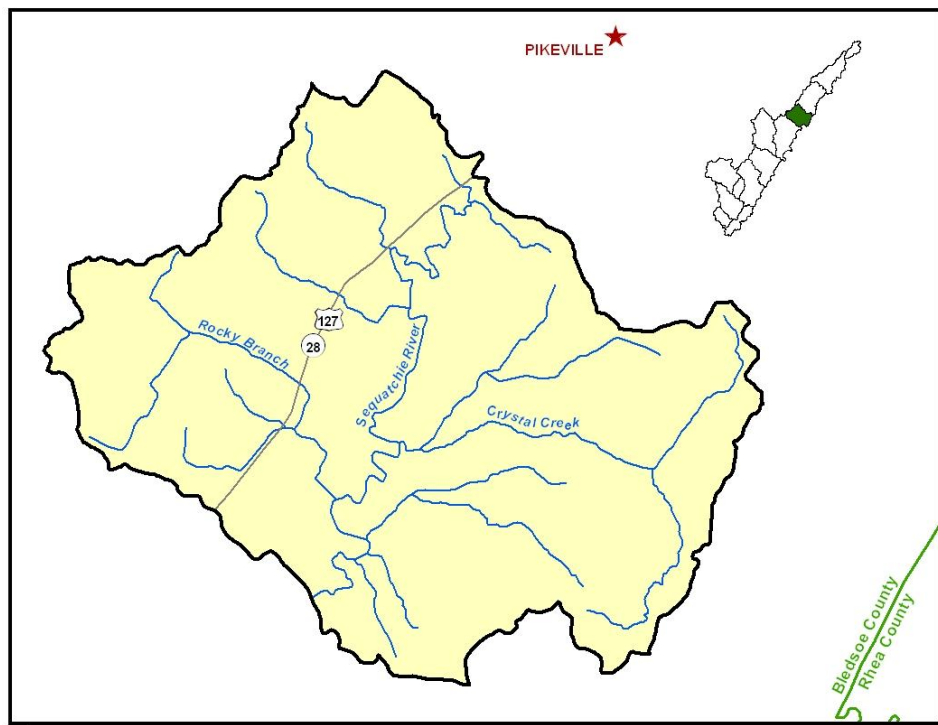


Figure 4-29. Locational Details of Subwatershed 060200040104.

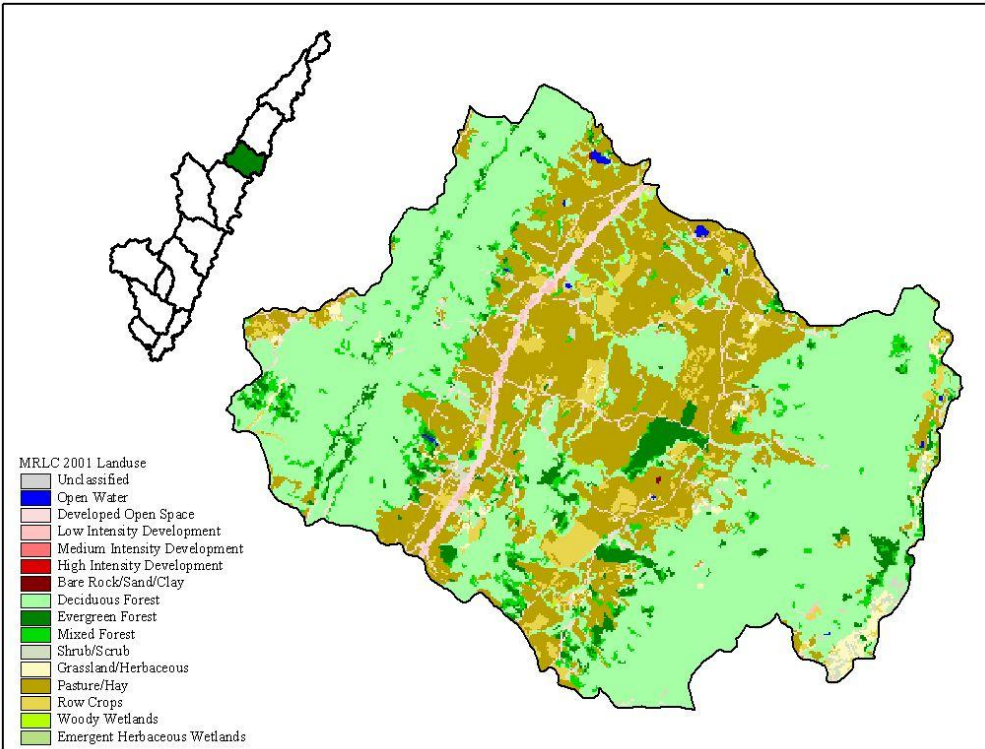


Figure 4-30. Illustration of Land Use Distribution in Subwatershed 060200040104.

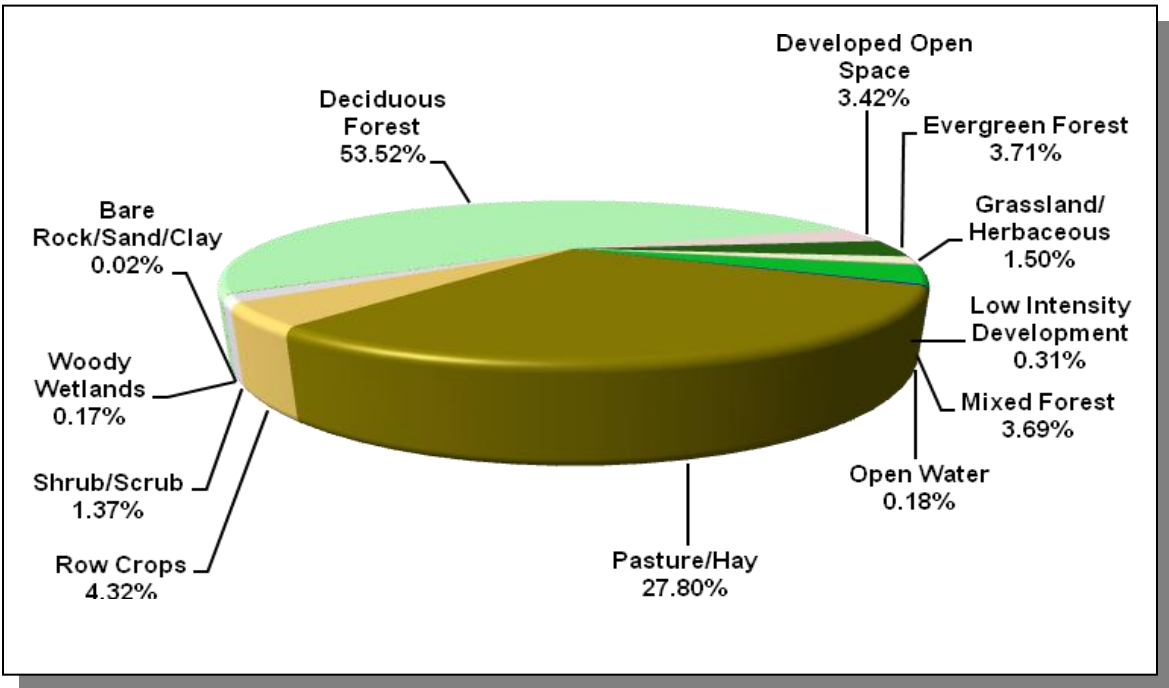


Figure 4-31. Land Use Distribution in Subwatershed 060200040104. More information is provided in Appendix IV.

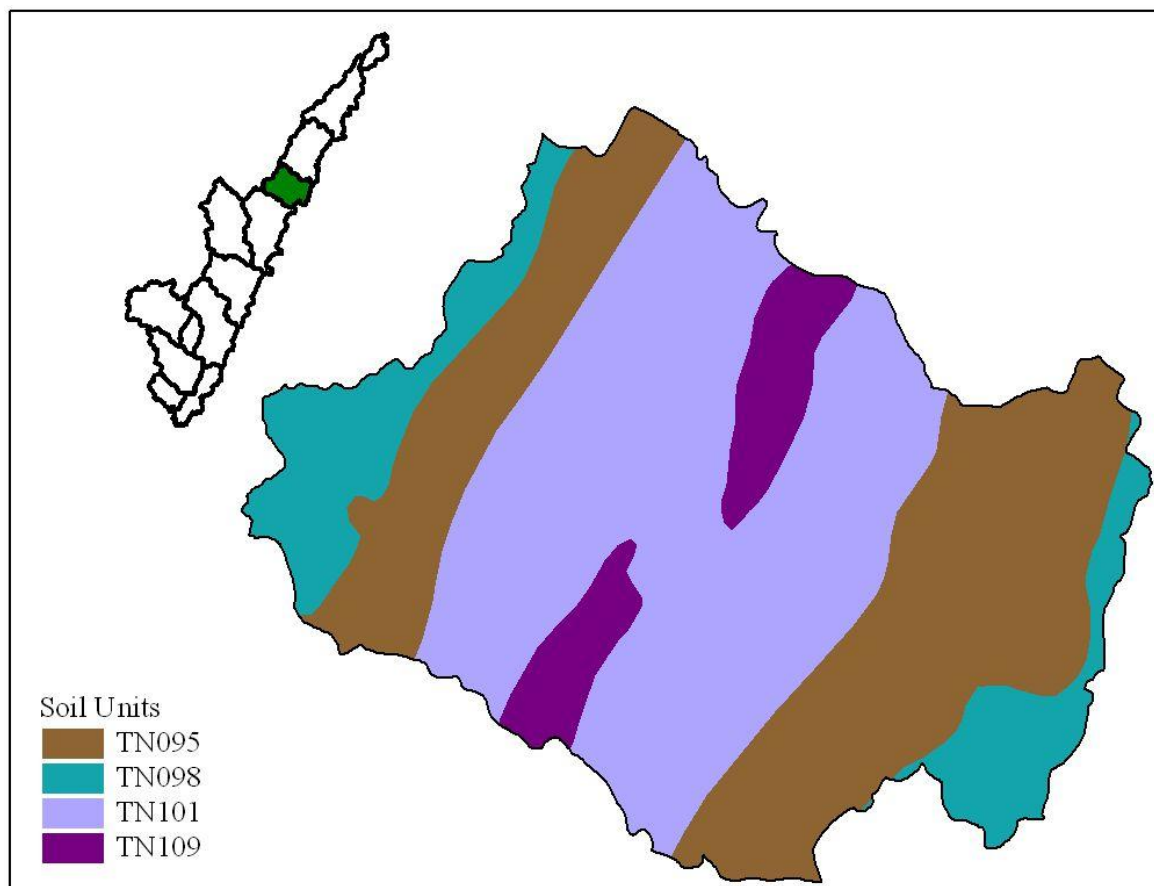


Figure 4-32. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040104.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	B	2.35	5.12	Loam	0.31
TN098	1.00	C	3.98	4.82	Loam	0.32
TN101	0.00	B	1.71	5.39	Loam	0.35
TN109	0.00	B	8.40	5.01	Sandy Loam	0.28

Table 4-17. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040104. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			% of County in Watershed	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Bledsoe	9,669	10,650	12,367	8.04	777	856	994	27.90

Table 4-18. Population Estimates in Subwatershed 060200040104.

			NUMBER OF HOUSING UNITS			
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Pikeville	Bledsoe	1,771	802	640	162	0

Table 4-19. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 060200040104.

4.2.D.ii USGS Gaging Stations and STORET Sites.

There are no USGS continuous records gaging stations located in subwatershed 060200040104.

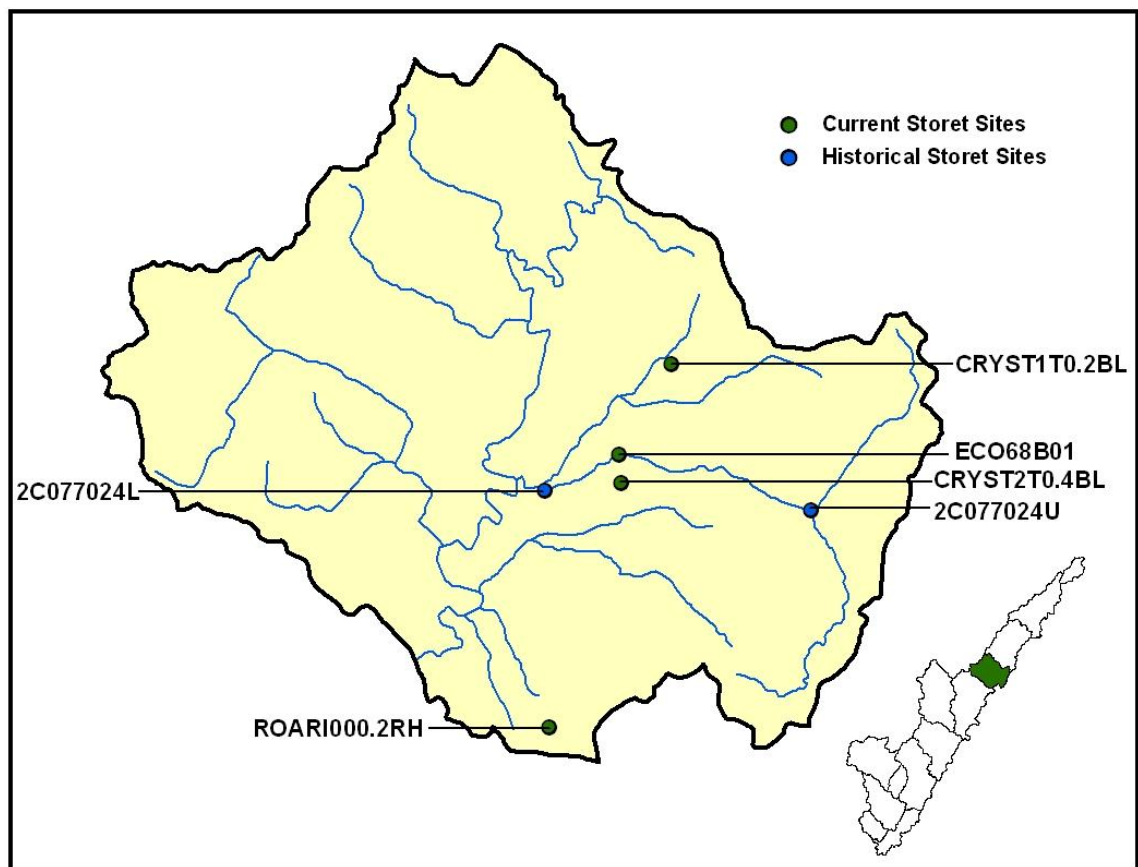


Figure 4-33. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060200040104. More information, including site names and locations, is provided in Appendix IV.

4.2.D,iii. Permitted Activities.

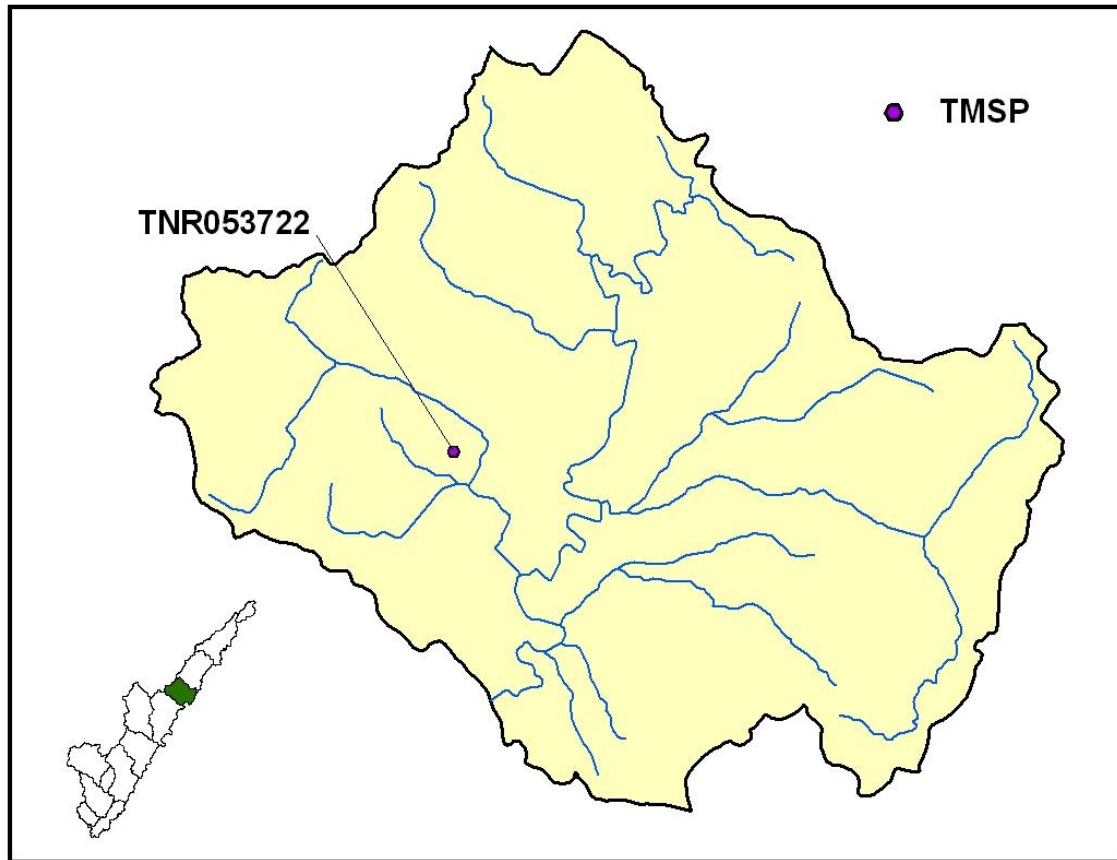


Figure 4-34. Location of Permits Issued in Subwatershed 060200040104. More information, including the names of facilities, is provided in Appendix IV.

4.2.D.iv. Nonpoint Source Contributions.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Bledsoe	11,691	25,110	1,474	22	275	162

Table 4-20. Summary of Livestock Count Estimates by County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

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	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Bledsoe	186.2	186.2	0.9	2.3

Table 4-21. Forest Acreage and Annual Removal Rates (1987-1994) by County.

CROPS	TONS/ACRE/YEAR
Corn (Row Crops)	11.22
Soybeans (Row Crops)	4.85
All Other Row Crops	4.45
Wheat (Close Grown Cropland)	2.81
Farmsteads and Ranch Headquarters	1.19
Legume Grass (Hayland)	1.16
Conservation Reserve Program Land	1.00
Grass (Pastureland)	0.68
Grass Forbs Legumes Mixed (Pastureland)	0.54
Grass (Hayland)	0.17

Table 4-22. Annual Estimated Total Soil Loss in Subwatershed 060200040104.

4.2.E. 060200040105 (Sequatchie River).

4.2.E.i. General Description.

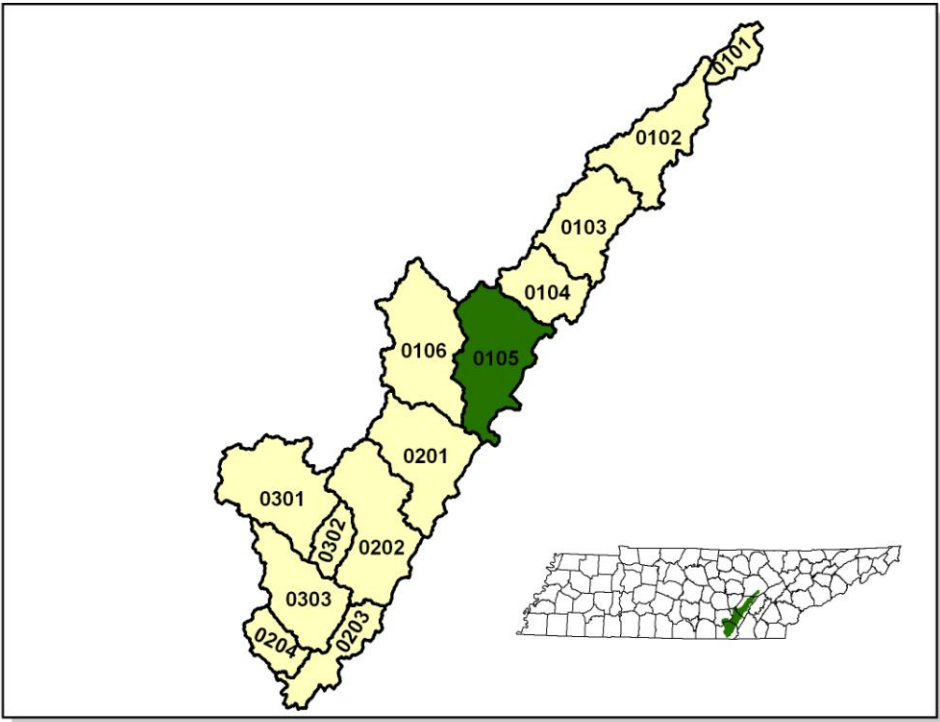


Figure 4-35. Location of Subwatershed 060200040105. All Sequatchie River HUC-12 subwatershed boundaries are shown for reference.

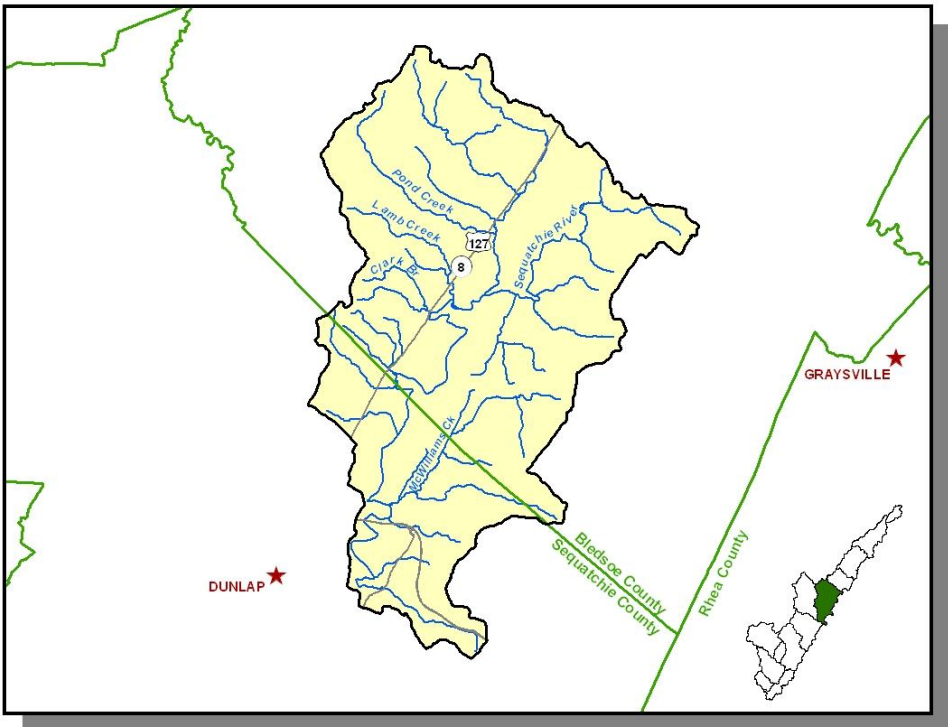


Figure 4-36. Locational Details of Subwatershed 060200040105.

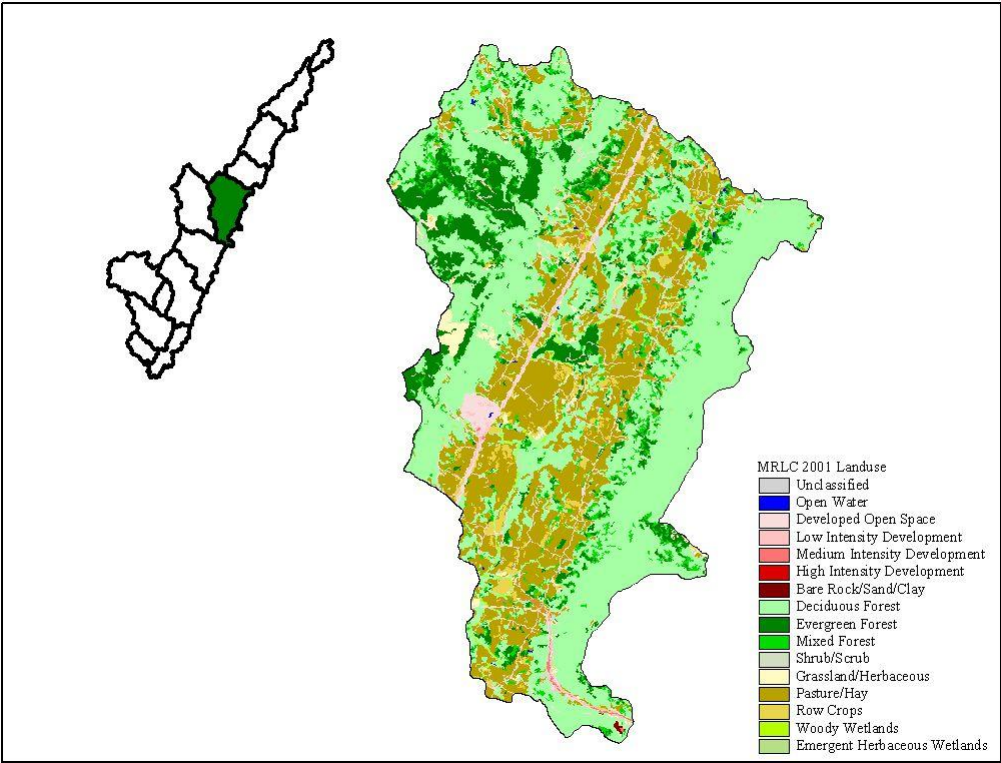


Figure 4-37. Illustration of Land Use Distribution in Subwatershed 060200040105.

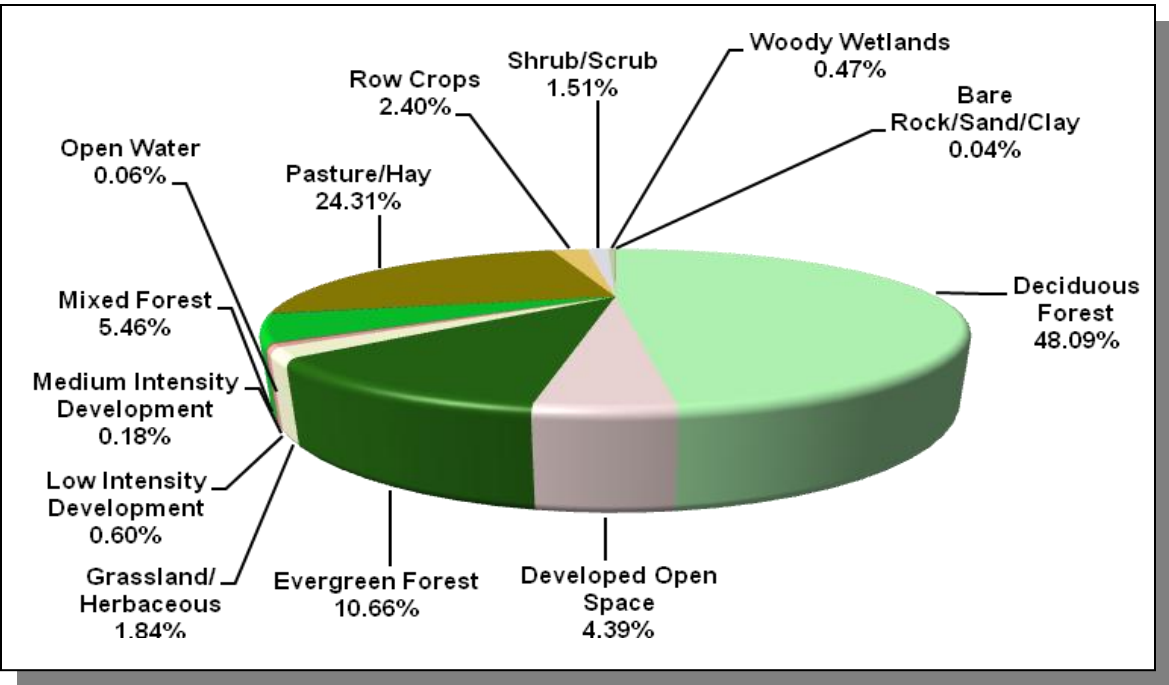


Figure 4-38. Land Use Distribution in Subwatershed 060200040105. More information is provided in Appendix IV.

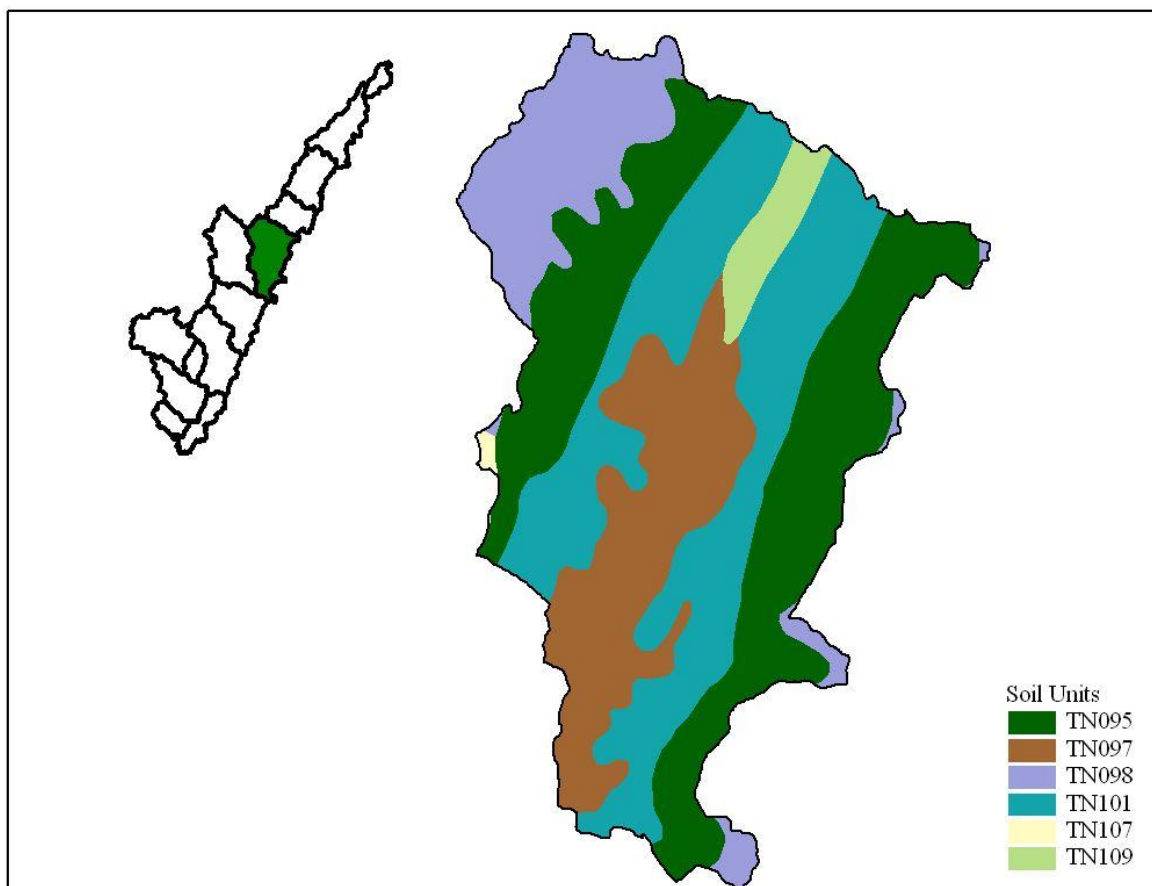


Figure 4-39. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040105.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	B	2.35	5.12	Loam	0.31
TN097	0.00	B	1.62	5.55	Loam	0.32
TN098	1.00	C	3.98	4.82	Loam	0.32
TN101	0.00	B	1.71	5.39	Loam	0.35
TN107	1.00	C	6.34	4.84	Loam	0.28
TN109	0.00	B	8.40	5.01	Sandy Loam	0.28

Table 4-23. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040105. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			% of County in Watershed	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Bledsoe	9,669	10,650	12,367	11.51	1,113	1,226	1,424	27.90
Sequatchie	8,863	10,119	11,370	7.43	659	752	845	28.20
Totals	18,532	20,769	23,737		1,772	1,978	2,269	28.00

Table 4-24. Population Estimates in Subwatershed 060200040105.

			NUMBER OF HOUSING UNITS			
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Dunlap	Sequatchie	3,731	1,501	591	896	14

Table 4-25. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 060200040105.

4.2.E.ii USGS Gaging Stations and STORET Sites.



Figure 4-40. Location of USGS Continuous Record Gaging Stations in Subwatershed 060200040105. More information is provided in Appendix IV.

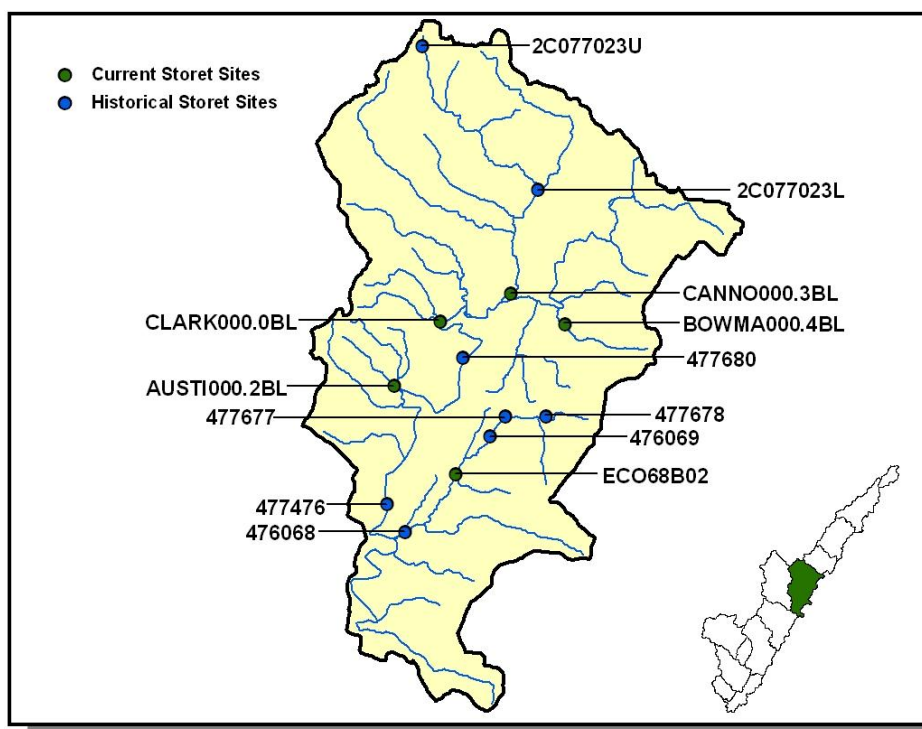


Figure 4-41. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060200040105. More information, including site names and locations, is provided in Appendix IV.

4.2.E.iii. Permitted Activities.

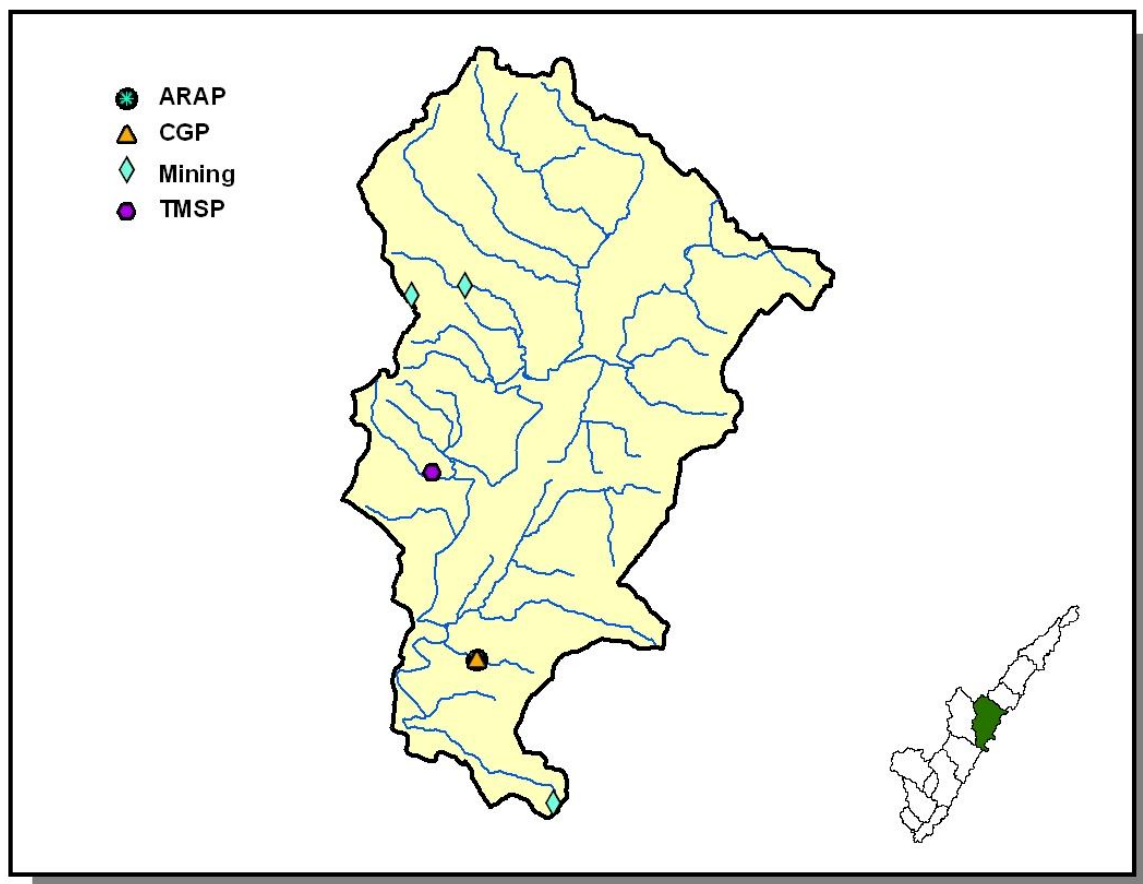


Figure 4-42. Location of Permits Issued in Subwatershed 060200040105. More information, including the names of facilities, is provided in Appendix IV.

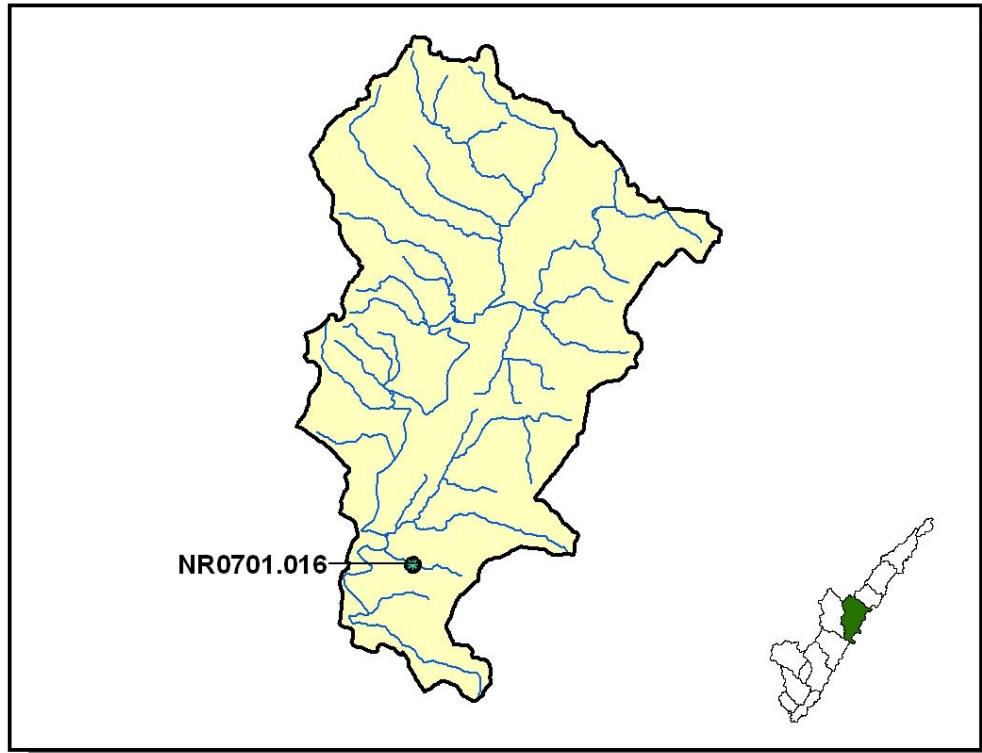


Figure 4-43. Location of ARAP (Aquatic Resource Alteration Permit) Sites in Subwatershed 060200040105. More information is provided in Appendix IV.

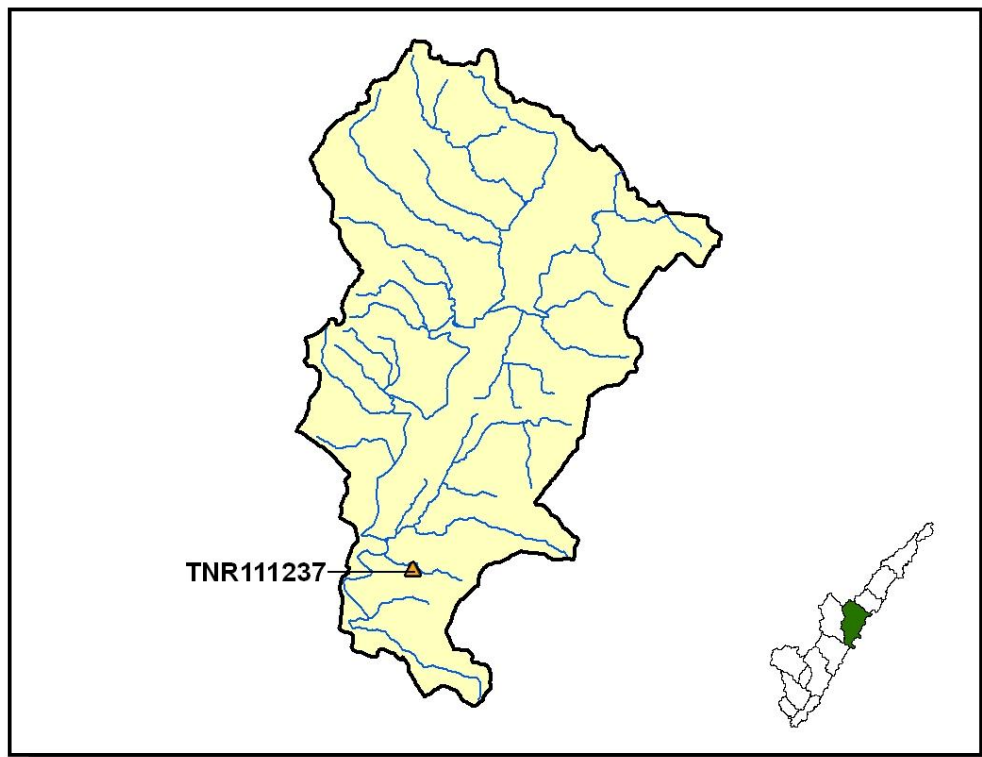


Figure 4-44. Location of CGP (Construction General Permit) Sites in Subwatershed 060200040105. More information is provided in Appendix IV.

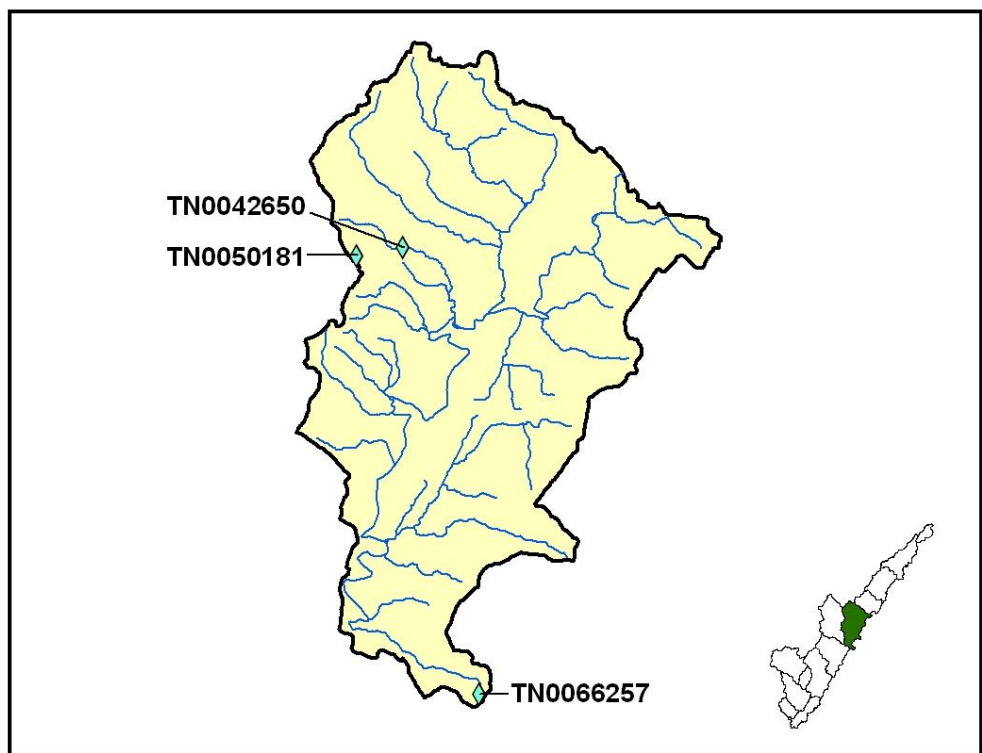


Figure 4-45. Location of Permitted Mining Facilities in Subwatershed 060200040105. More information is provided in Appendix IV.

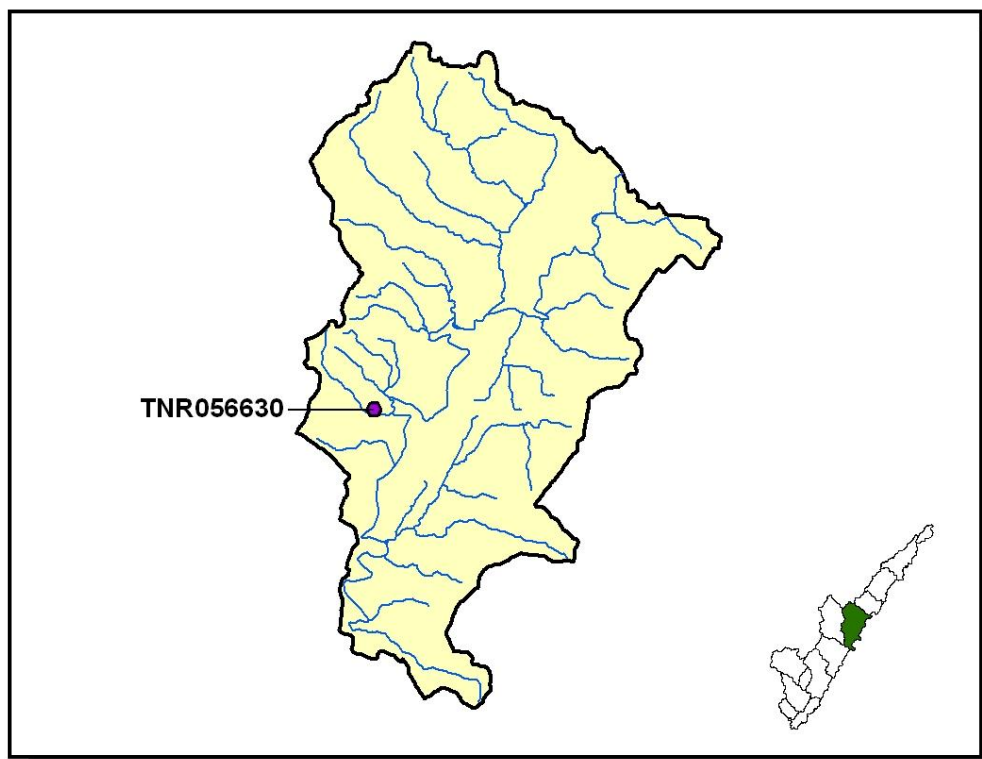


Figure 4-46. Location of TMSP (Tennessee Multi Sector Permit) Sites in Subwatershed 060200040105. More information is provided in Appendix IV.

4.2.E.iv. Nonpoint Source Contributions.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Bledsoe	11,691	25,110	1,474	22	275	162
Sequatchie	2,763	6,739	221	6		

Table 4-26. Summary of Livestock Count Estimates by County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Bledsoe	186.2	186.2	0.9	2.3

Table 4-27. Forest Acreage and Annual Removal Rates (1987-1994) by County.

CROPS	TONS/ACRE/YEAR
Corn (Row Crops)	8.64
Soybeans (Row Crops)	4.85
All Other Row Crops	4.45
Wheat (Close Grown Cropland)	2.81
Conservation Reserve Program Land	1.00
Legume Grass (Hayland)	0.88
Farmsteads and Ranch Headquarters	0.87
Grass (Pastureland)	0.80
Grass Forbs Legumes Mixed (Pastureland)	0.72
Grass (Hayland)	0.26

Table 4-28. Annual Estimated Total Soil Loss in Subwatershed 060200040105.

4.2.F. 060200040106 (Big Brush Creek).

4.2.F.i. General Description.

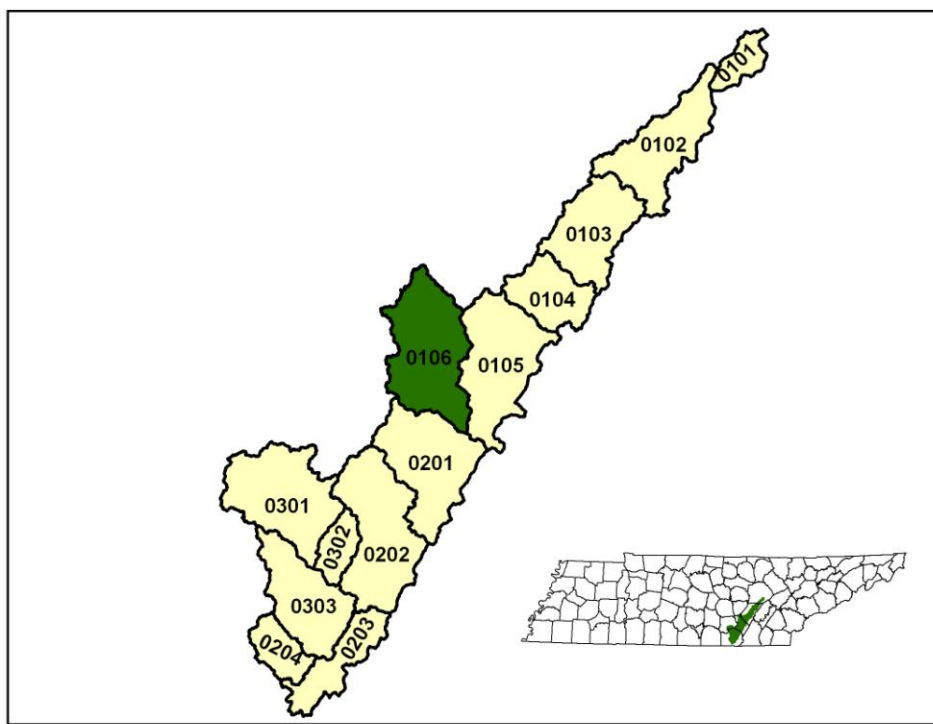


Figure 4-47. Location of Subwatershed 060200040106. All Sequatchie River HUC-12 subwatershed boundaries are shown for reference.

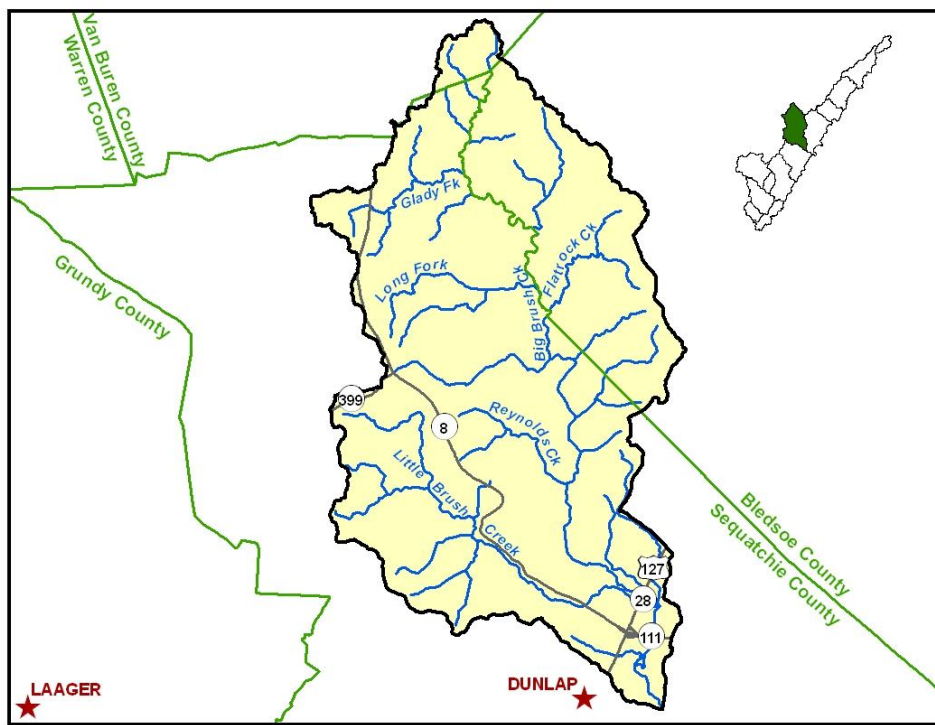


Figure 4-48. Locational Details of Subwatershed 060200040106.

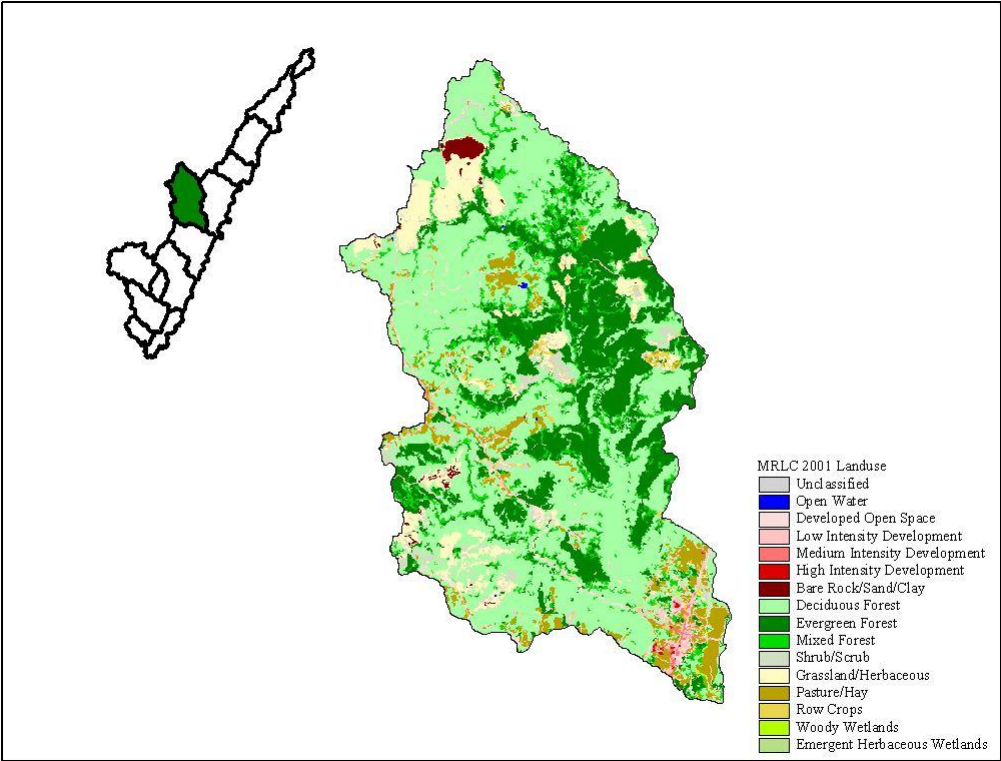


Figure 4-49. Illustration of Land Use Distribution in Subwatershed 060200040106.

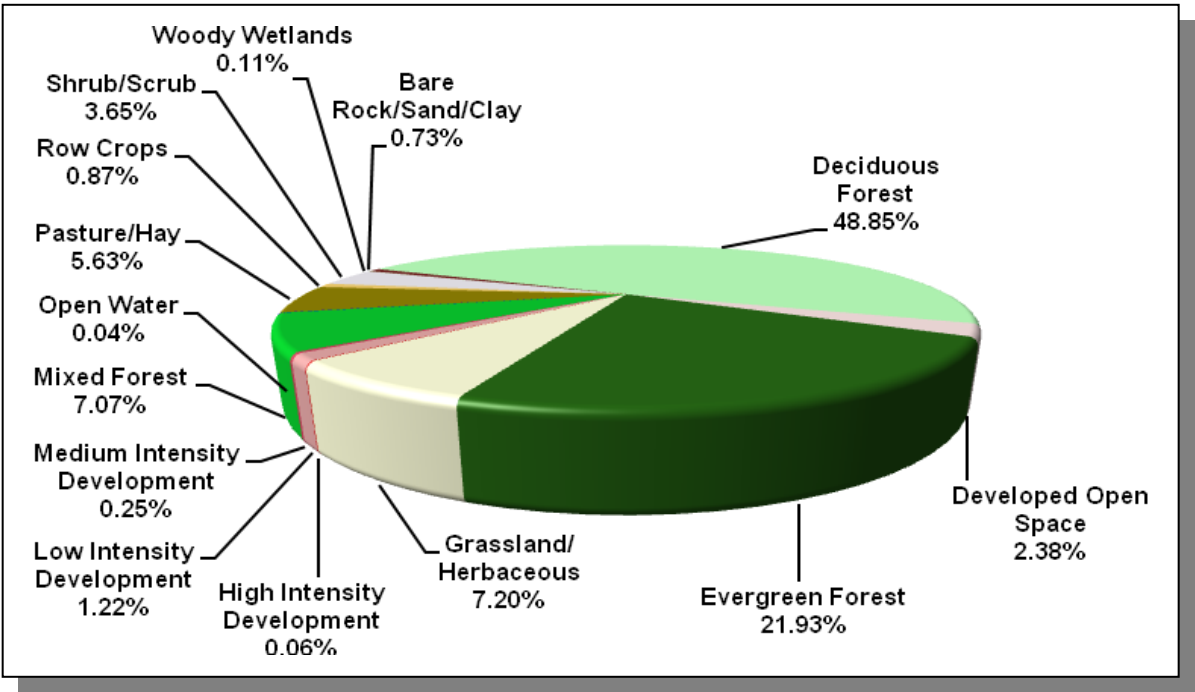


Figure 4-50. Land Use Distribution in Subwatershed 060200040106. More information is provided in Appendix IV.

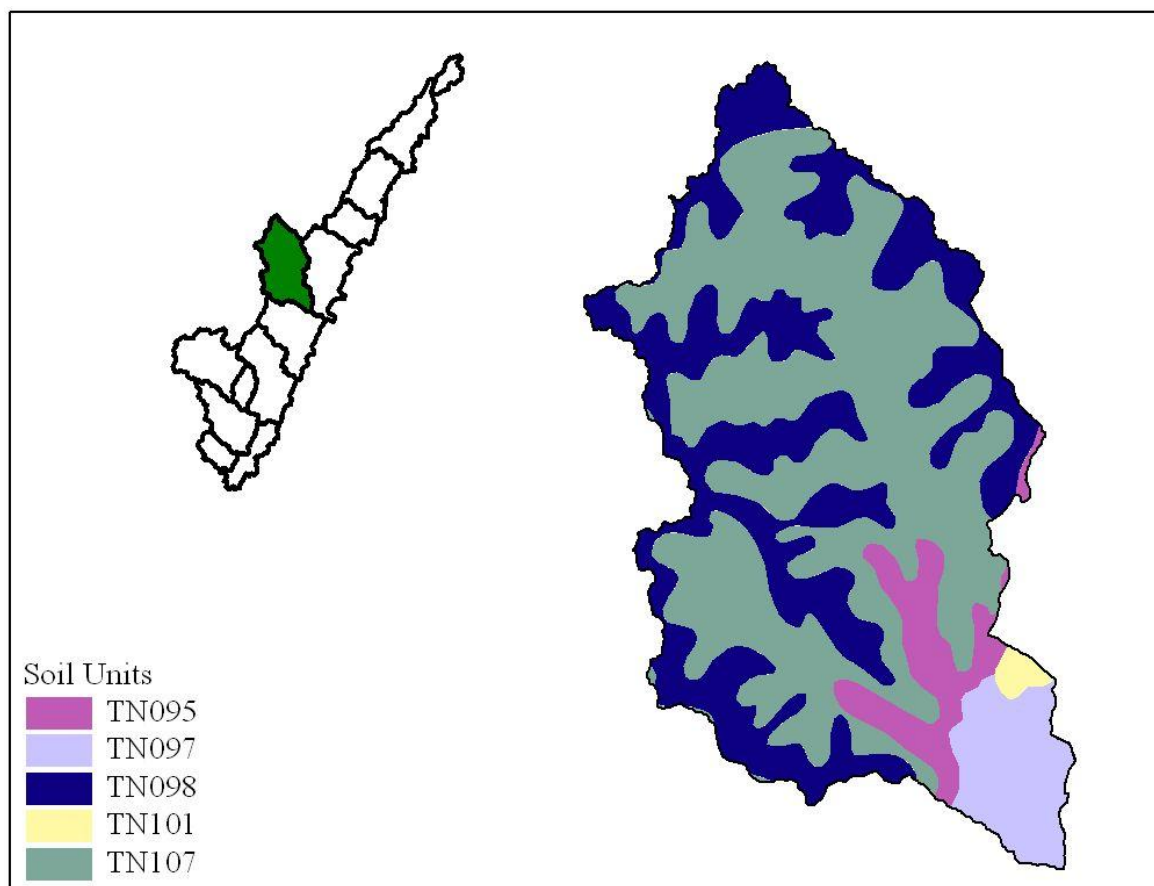


Figure 4-51. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040106.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	B	2.35	5.12	Loam	0.31
TN097	0.00	B	1.62	5.55	Loam	0.32
TN098	1.00	C	3.98	4.82	Loam	0.32
TN101	0.00	B	1.71	5.39	Loam	0.35
TN107	1.00	C	6.34	4.84	Loam	0.28

Table 4-29. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040106. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			% of County in Watershed	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Bledsoe	9,669	10,650	12,367	3.23	312	344	399	27.9
Sequatchie	8,863	10,119	11,370	21.09	1,869	2,134	2,398	28.3
Van Buren	4,846	5,060	5,508	0.34	17	17	19	11.8
Totals	23,378	25,829	29,245		2,198	2,495	2,816	28.1

Table 4-30. Population Estimates in Subwatershed 0602000400106

			NUMBER OF HOUSING UNITS			
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Dunlap	Sequatchie	3,731	1,501	591	896	14

Table 4-31. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 060200040106.

4.2.F.ii USGS Gaging Stations and STORET Sites.

There are no USGS continuous record gaging stations located in subwatershed 060200040106.

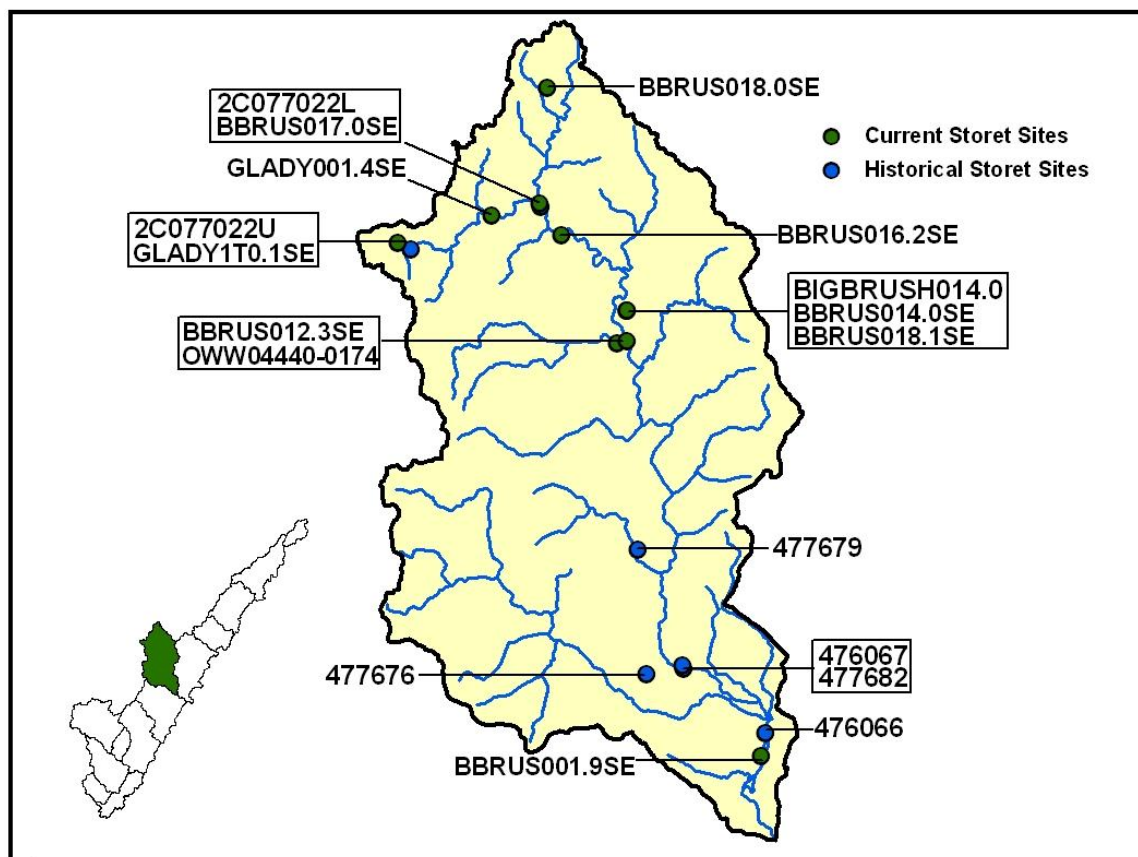


Figure 4-52. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060200040106. More information, including site names and locations, is provided in Appendix IV.

4.2.F.iii. Permitted Activities.

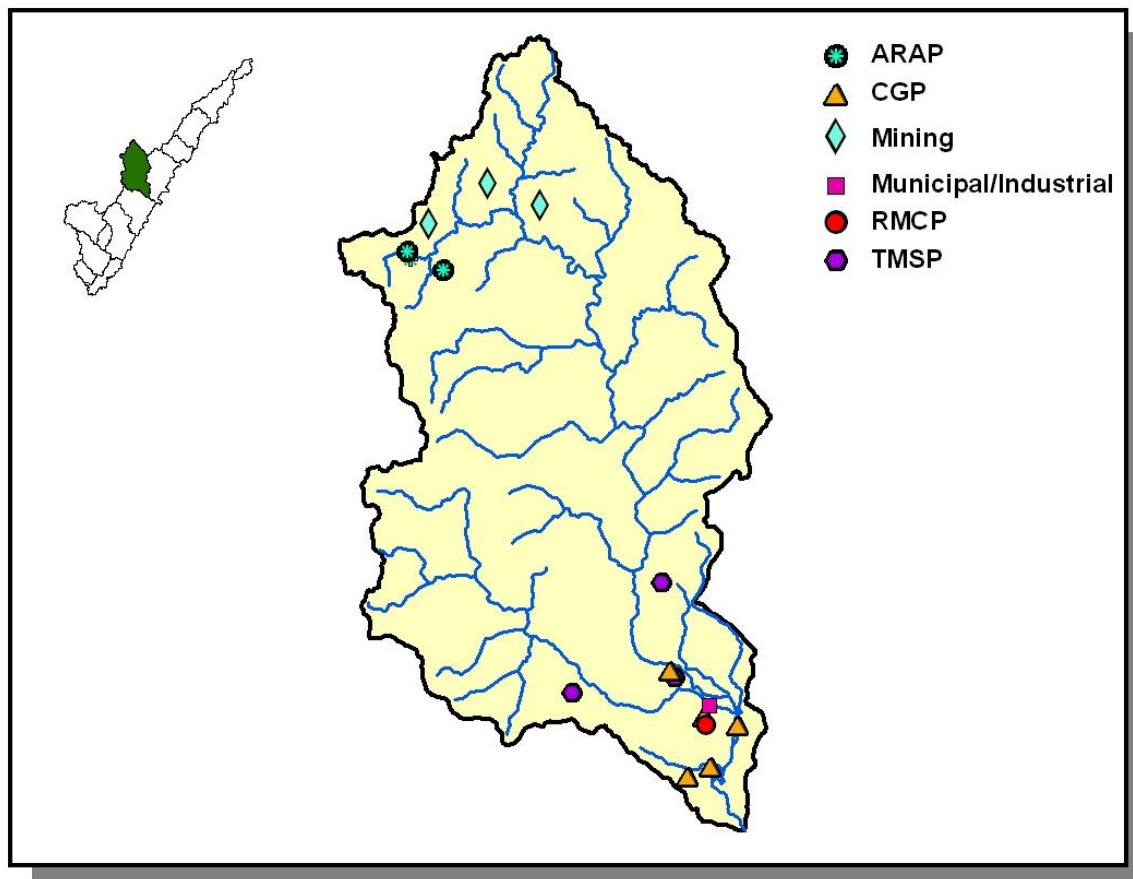


Figure 4-53. Location of Permits Issued in Subwatershed 060200040106. More information, including the names of facilities, is provided in Appendix IV.

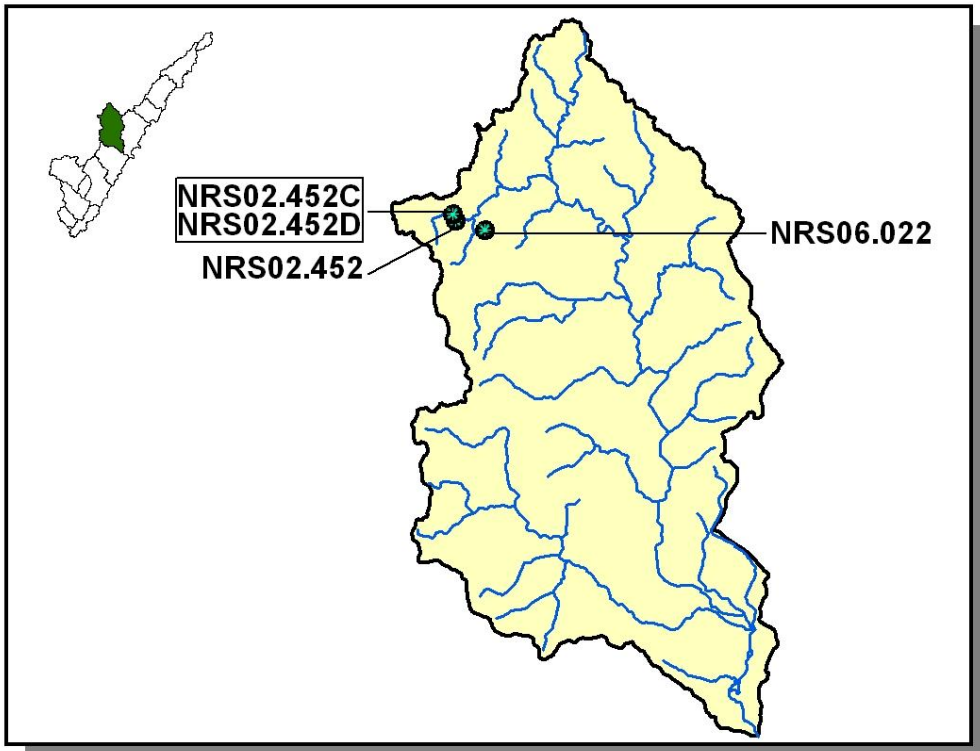


Figure 4-54. Location of ARAP (Aquatic Resource Alteration Permit) Sites in Subwatershed 060200040106. More information is provided in Appendix IV.

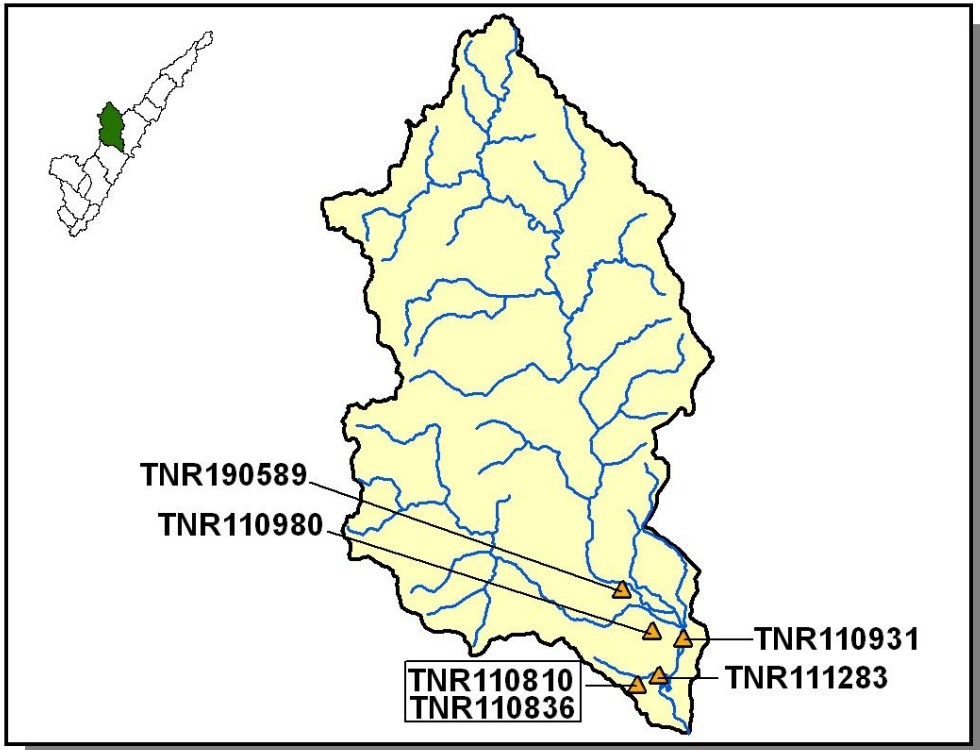


Figure 4-55. Location of CGP (Construction General Permit) Sites in Subwatershed 060200040106. More information is provided in Appendix IV.

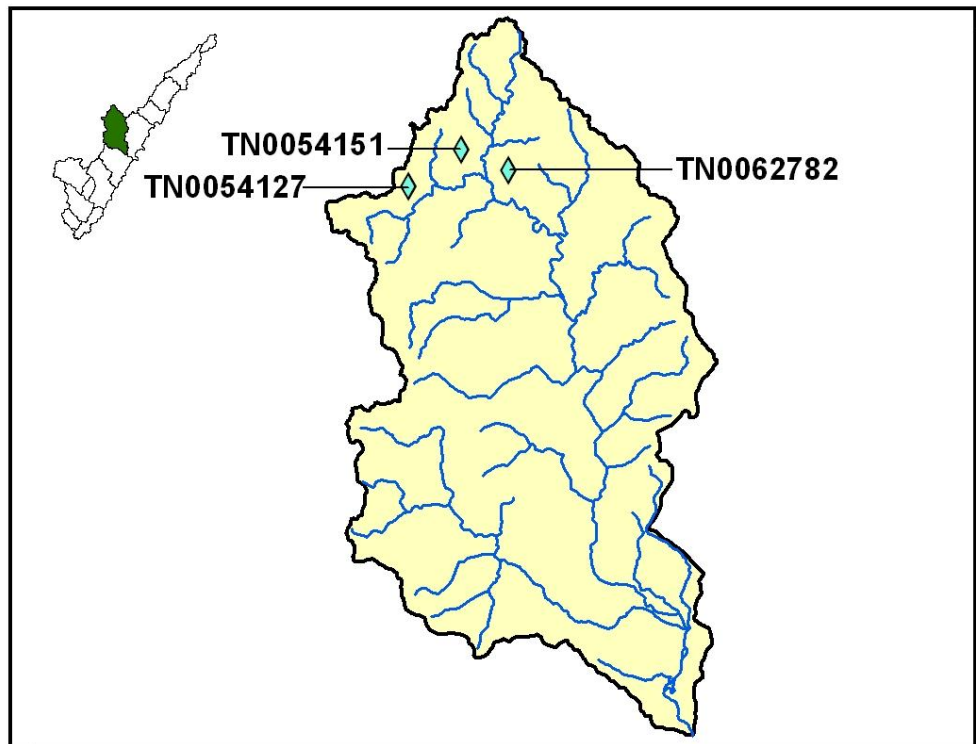


Figure 4-56. Location of Permitted Mining Facilities in Subwatershed 060200040106. More information is provided in Appendix IV.

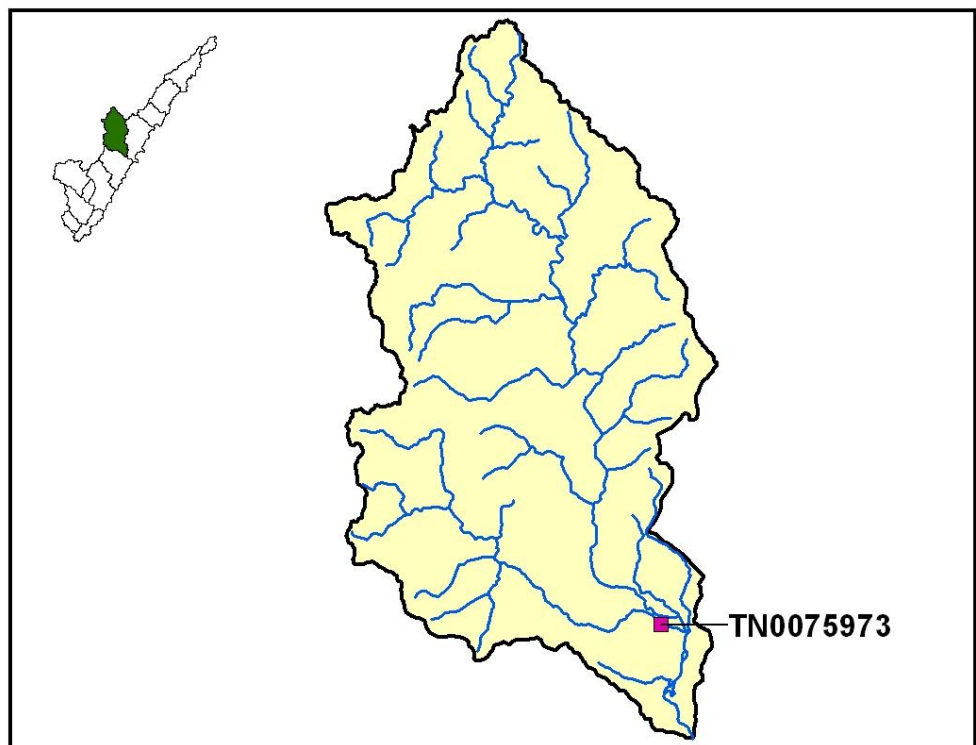


Figure 4-57. Location of Permitted Municipal and Industrial Facilities in Subwatershed 060200040106. More information, including the name of the facility is provided in Appendix IV.

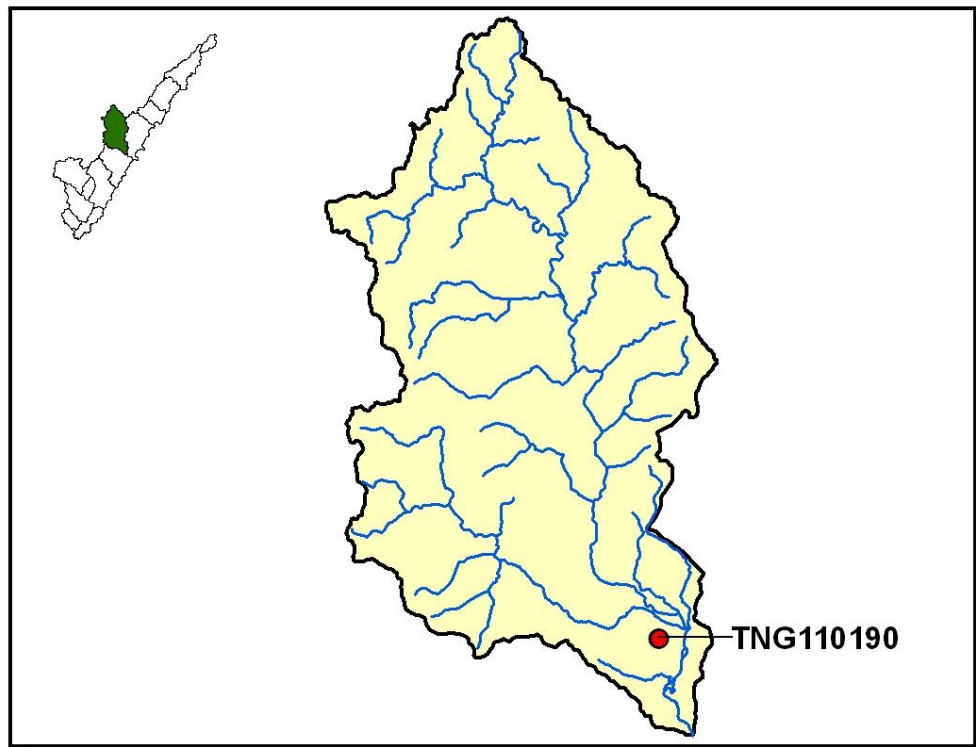


Figure 4-58. Location of RMCP (Ready Mix Concrete Plant) facilities in Subwatershed 060200040106. More information, including the names of facilities, is provided in Appendix IV.

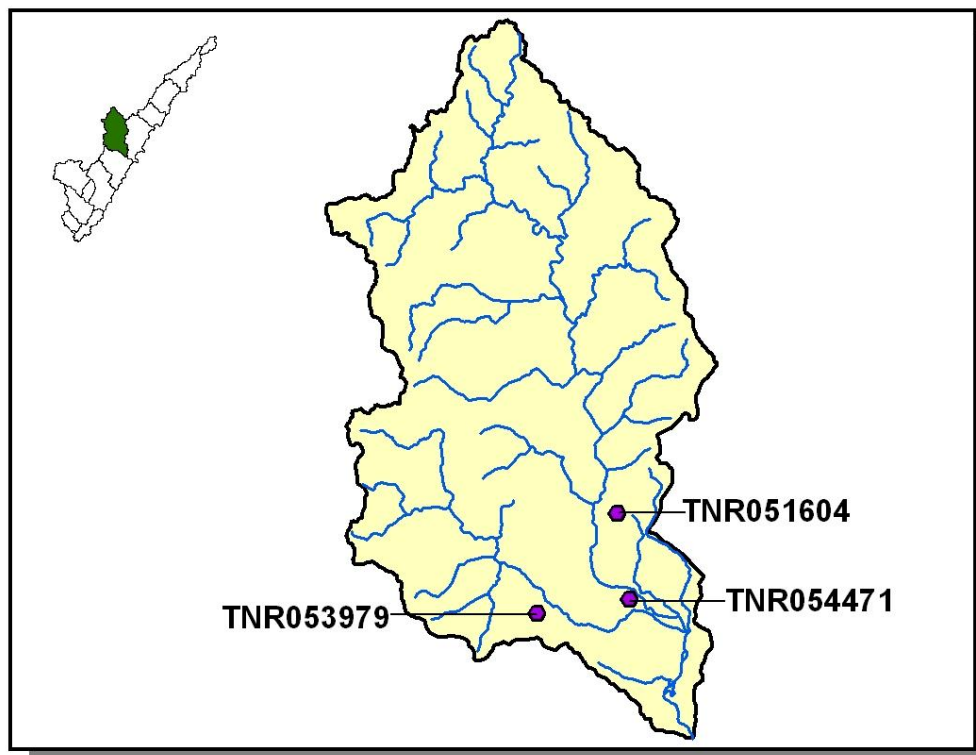


Figure 4-59. Location of TMSP (Tennessee Multi Sector Permit) Sites in Subwatershed 060200040106. More information is provided in Appendix IV.

4.2.F.iv. Nonpoint Source Contributions.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Bledsoe	11,691	25,110	1,474	22	275	162
Sequatchie	2,763	6,739	221	6		
Van Buren	3,669	7,876	412	7		

Table 4-32. Summary of Livestock Count Estimates by County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Bledsoe	186.2	186.2	0.9	2.3
Van Buren	145.0	135.4	2.3	9.5

Table 4-33. Forest Acreage and Annual Removal Rates (1987-1994) by County.

CROPS	TONS/ACRE/YEAR
Soybeans (Row Crops)	4.85
All Other Row Crops	4.45
Corn (Row Crops)	4.15
Other (Horticultural)	3.72
Wheat (Close Grown Cropland)	2.81
Grass Forbs Legumes Mixed (Pastureland)	1.02
Grass (Pastureland)	1.01
Conservation Reserve Program Land	1.00
Grass (Hayland)	0.41
Legume Grass (Hayland)	0.40
Farmsteads and Ranch Headquarters	0.32

Table 4-34. Annual Estimated Total Soil Loss in Subwatershed 060200040106.

4.2.G. 060200040201 (Sequatchie River).

4.2.G.i. General Description.

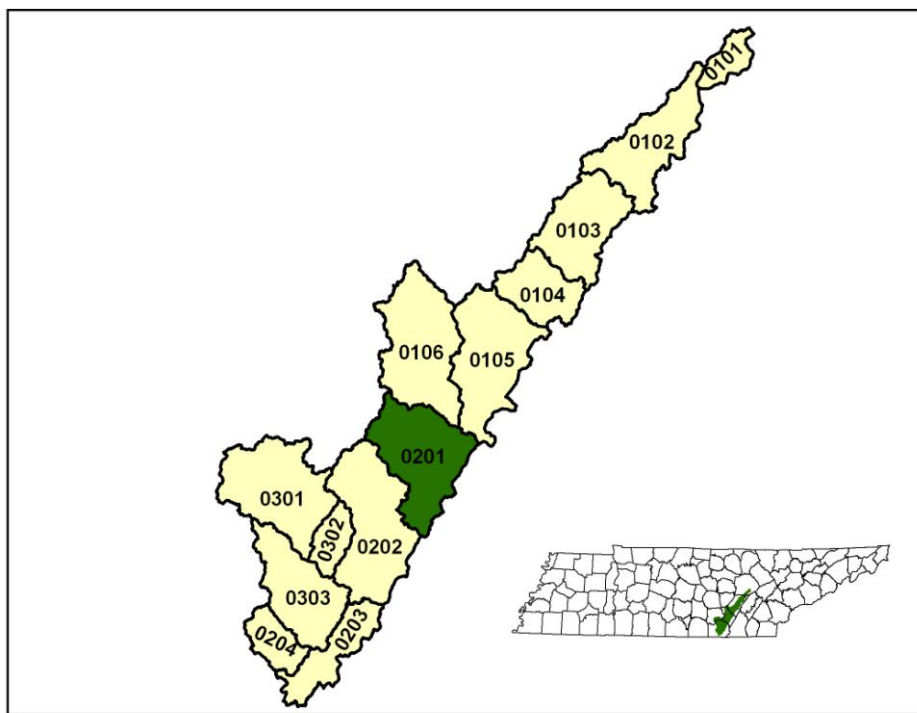


Figure 4-60. Location of Subwatershed 060200040201. All Sequatchie River HUC-12 subwatershed boundaries are shown for reference.

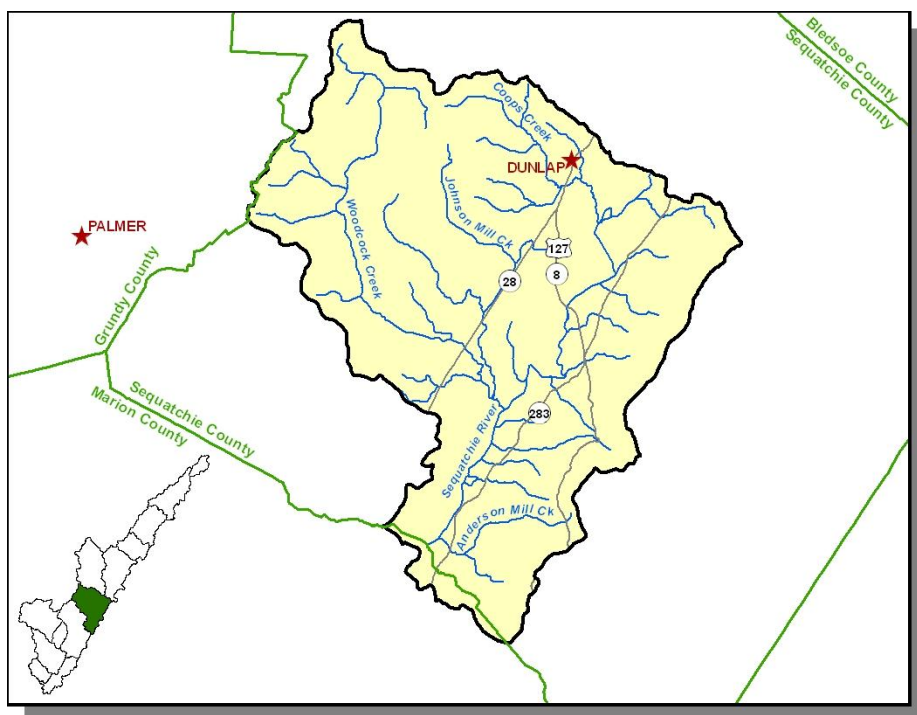


Figure 4-61. Locational Details of Subwatershed 060200040201.

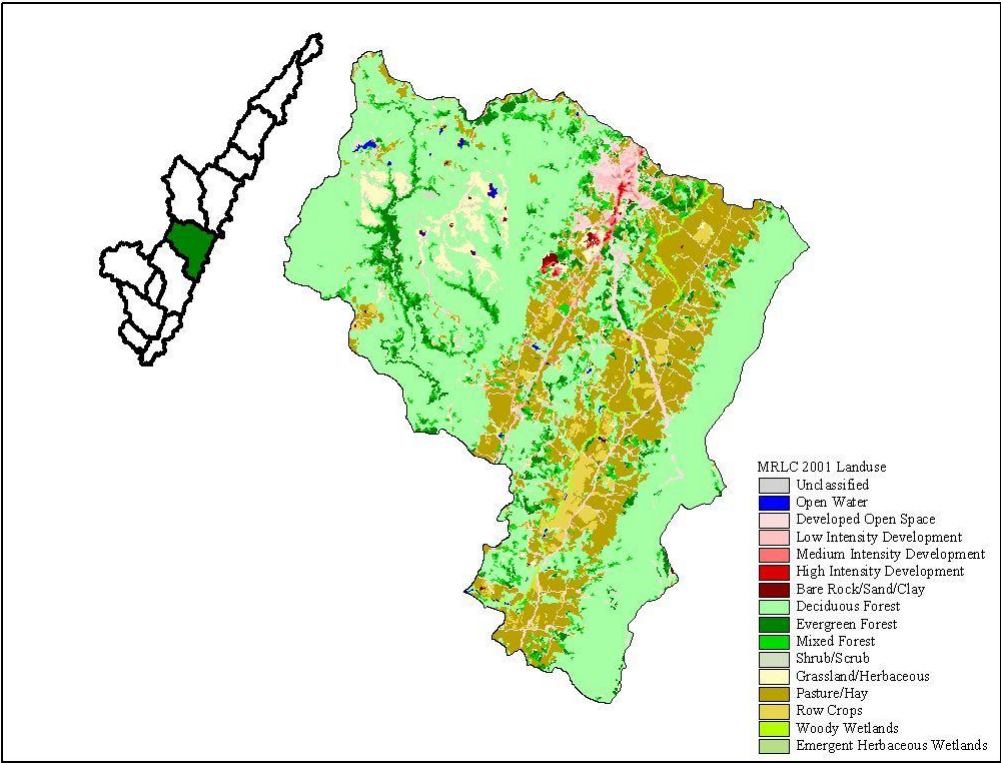


Figure 4-62. Illustration of Land Use Distribution in Subwatershed 060200040201.

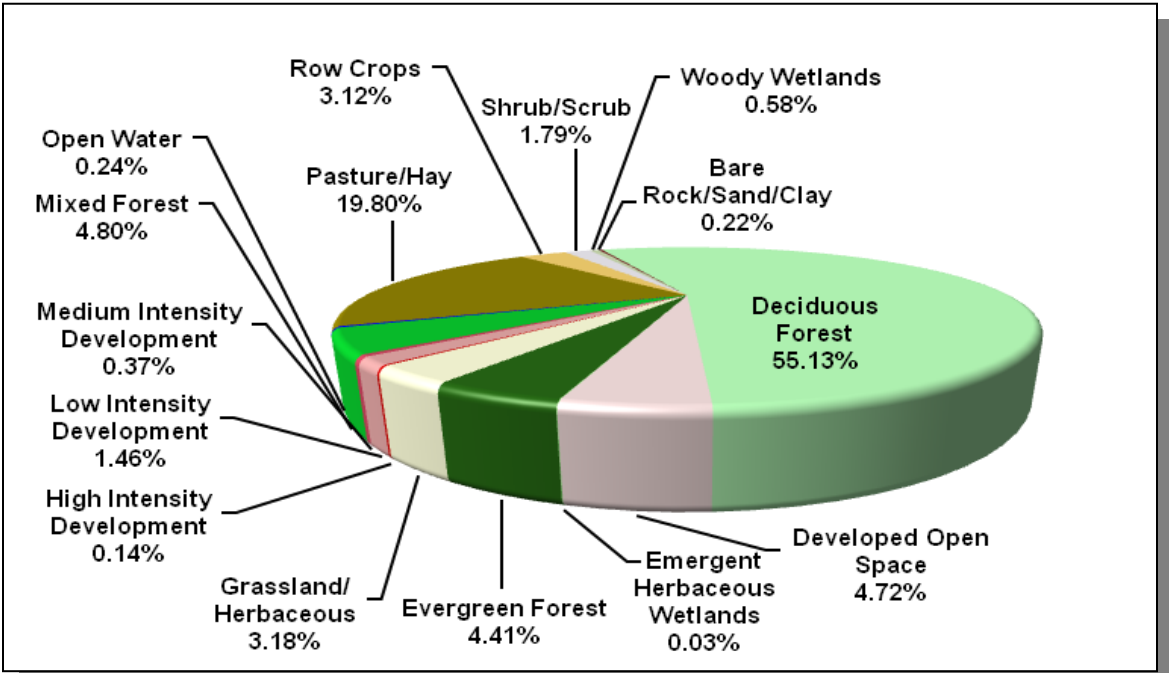


Figure 4-63. Land Use Distribution in Subwatershed 060200040201. More information is provided in Appendix IV.

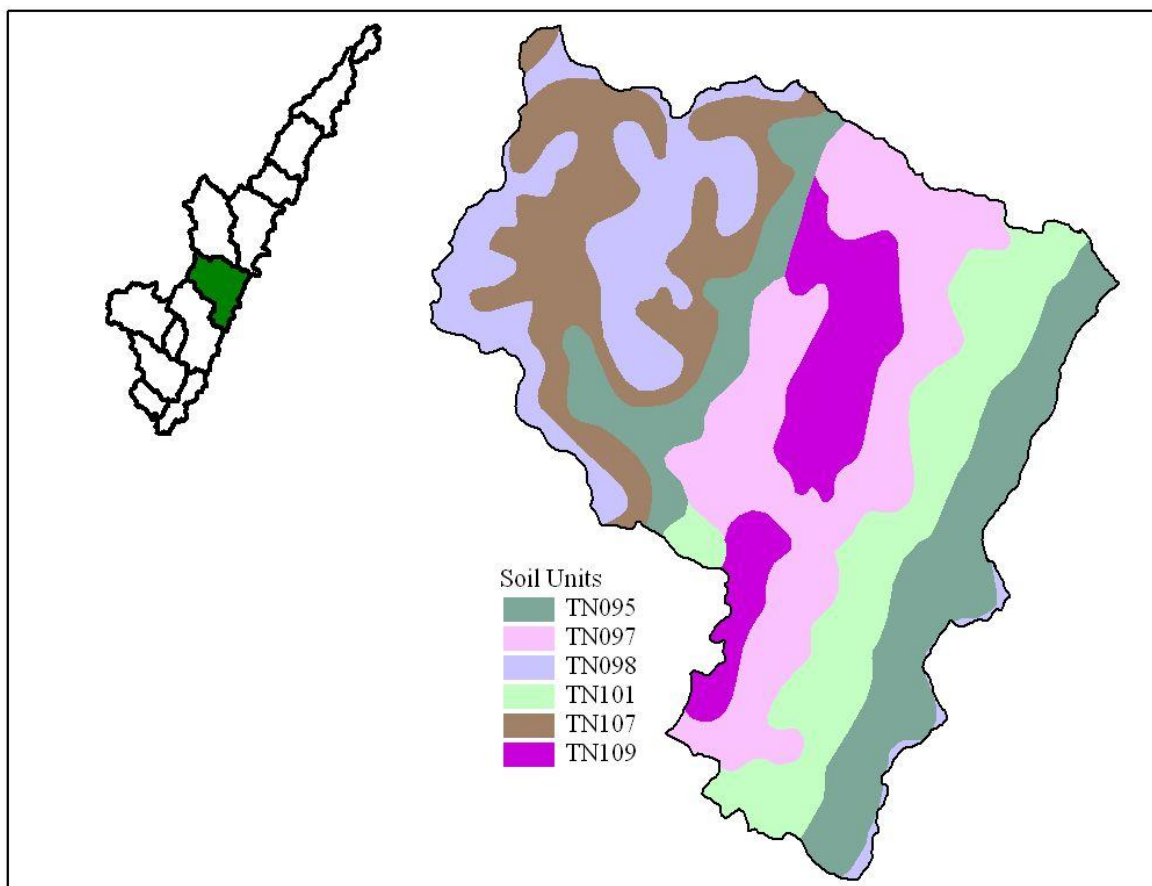


Figure 4-64. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040201.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	B	2.35	5.12	Loam	0.31
TN097	0.00	B	1.62	5.55	Loam	0.32
TN098	1.00	C	3.98	4.82	Loam	0.32
TN101	0.00	B	1.71	5.39	Loam	0.35
TN107	1.00	C	6.34	4.84	Loam	0.28
TN109	0.00	B	8.40	5.01	Sandy Loam	0.28

Table 4-35. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040201. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			% of County in Watershed	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Marion	24,860	26,674	27,776	0.50	125	134	139	11.20
Sequatchie	8,863	10,119	11,370	22.69	2,011	2,296	2,580	28.30
Totals	33,723	36,793	39,146		2,136	2,430	2,719	27.30

Table 4-36. Population Estimates in Subwatershed 060200040201.

			NUMBER OF HOUSING UNITS			
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Dunlap	Sequatchie	3,731	1,501	591	896	14

Table 4-37. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 060200040201.

4.2.G.ii USGS Gaging Stations and STORET Sites.

There are no USGS continuous record gaging stations located in subwatershed 060200040201.

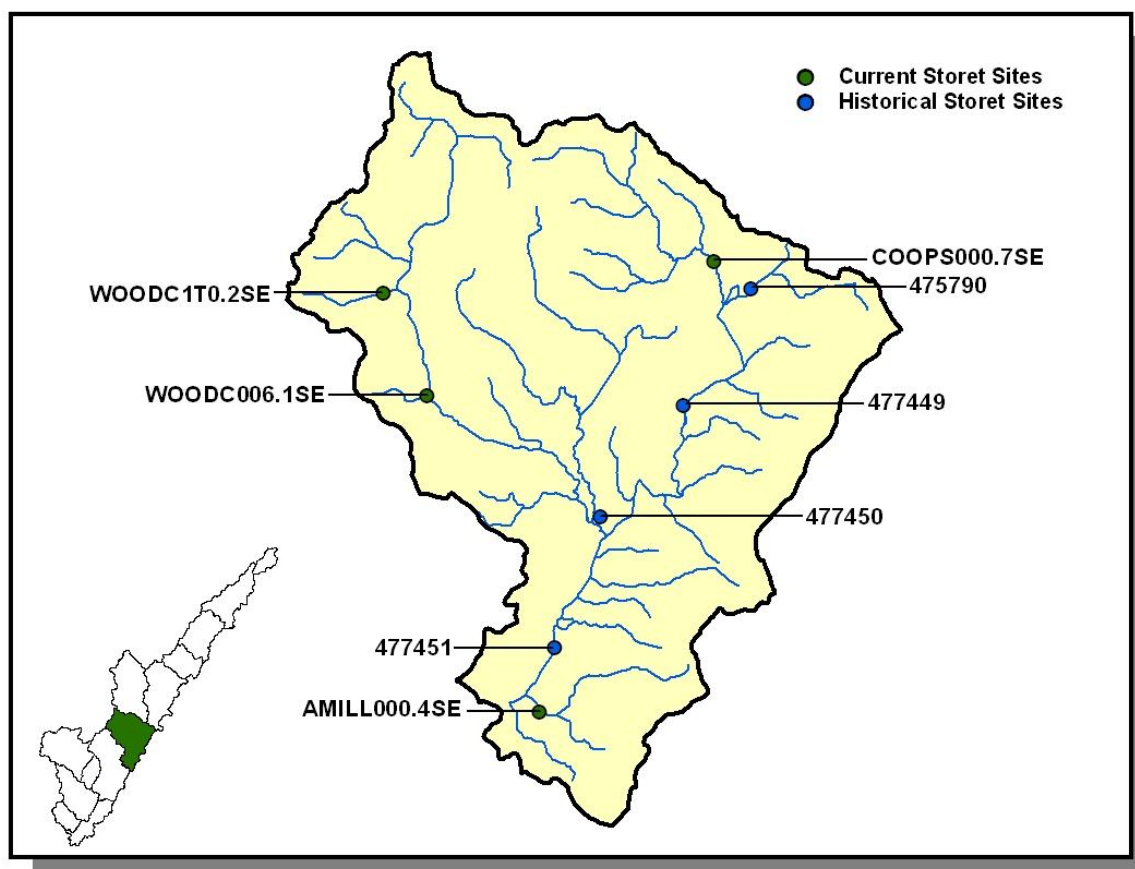


Figure 4-65. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060200040201. More information, including site names and locations, is provided in Appendix IV.

4.2.G.iii. Permitted Activities.

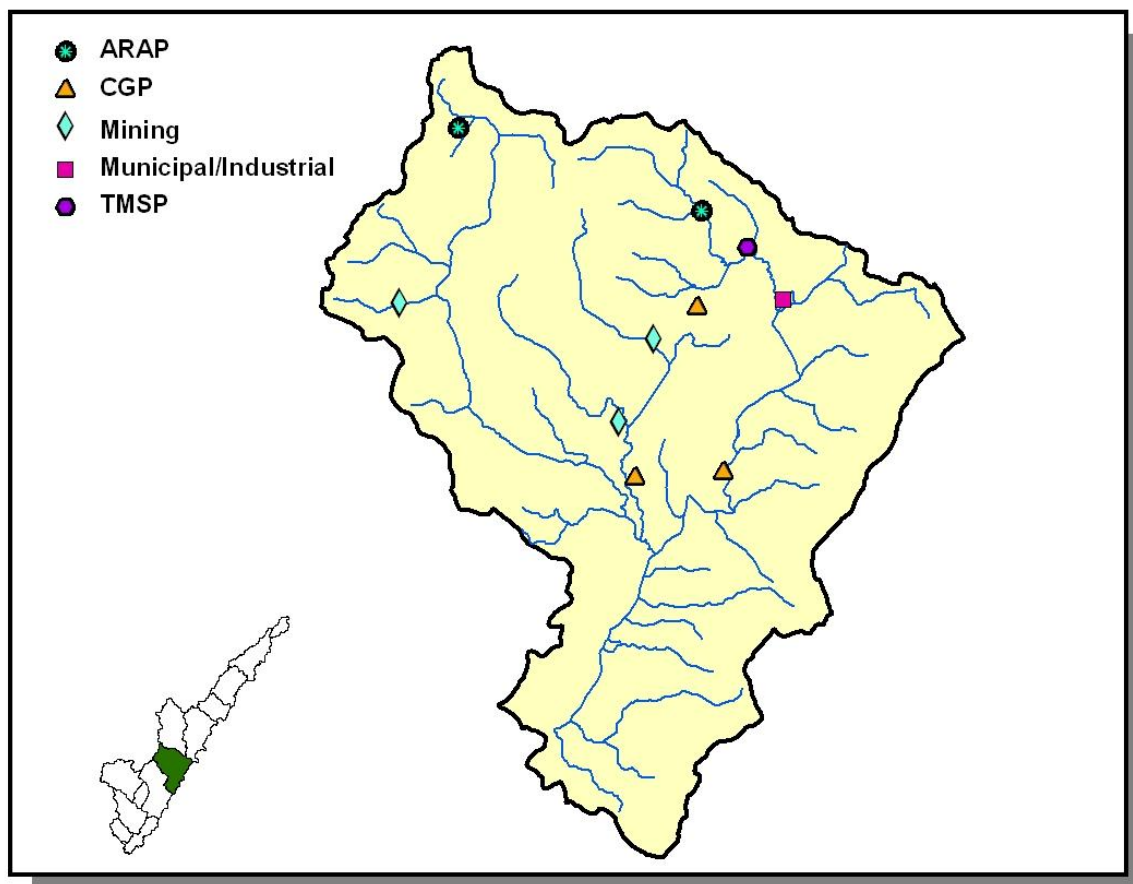


Figure 4-66. Location of Permits Issued in Subwatershed 060200040201. More information, including the names of facilities, is provided in Appendix IV.

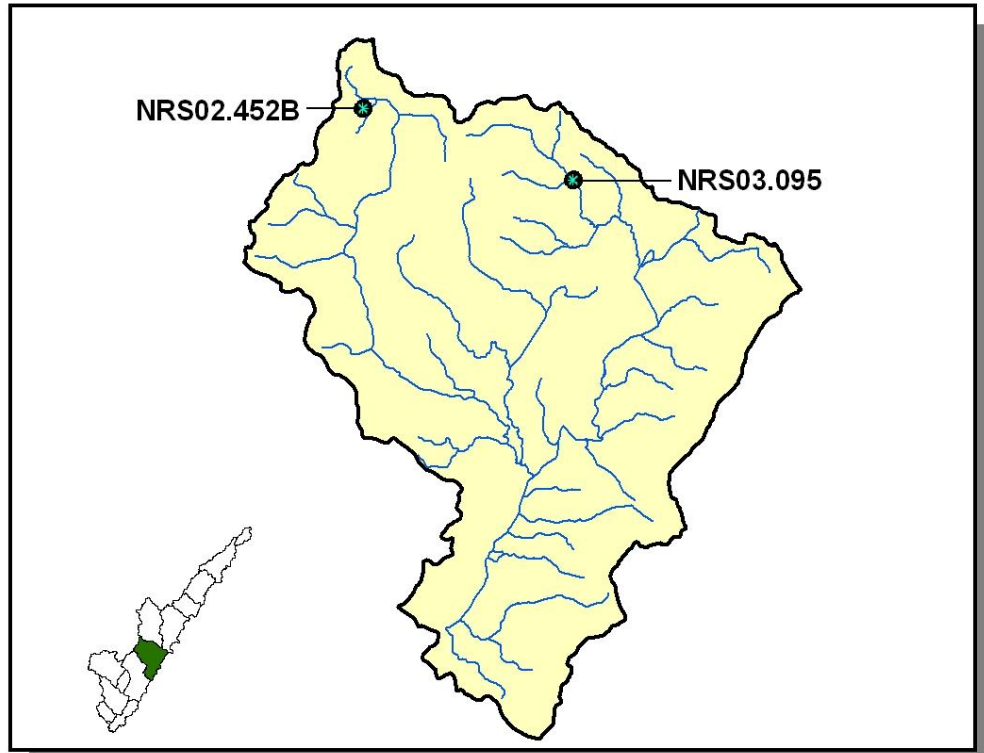


Figure 4-67. Location of ARAP (Aquatic Resource Alteration Permit) Sites in Subwatershed 060200040201. More information is provided in Appendix IV.

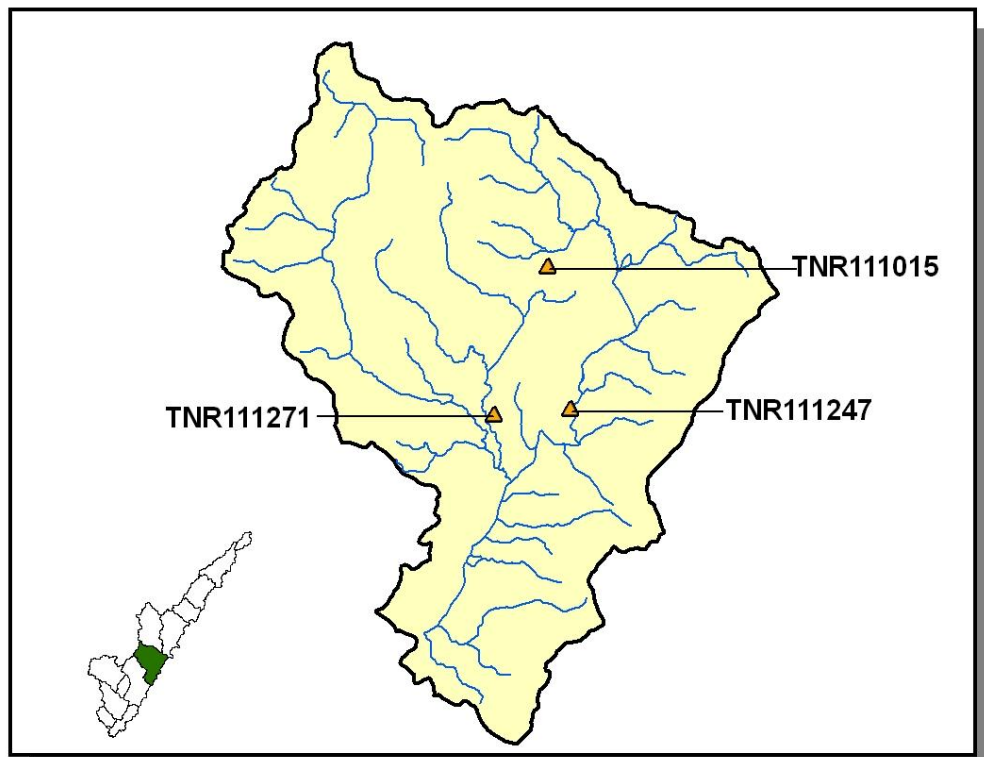


Figure 4-68. Location of CGP (Construction General Permit) Sites in Subwatershed 060200040201. More information is provided in Appendix IV.

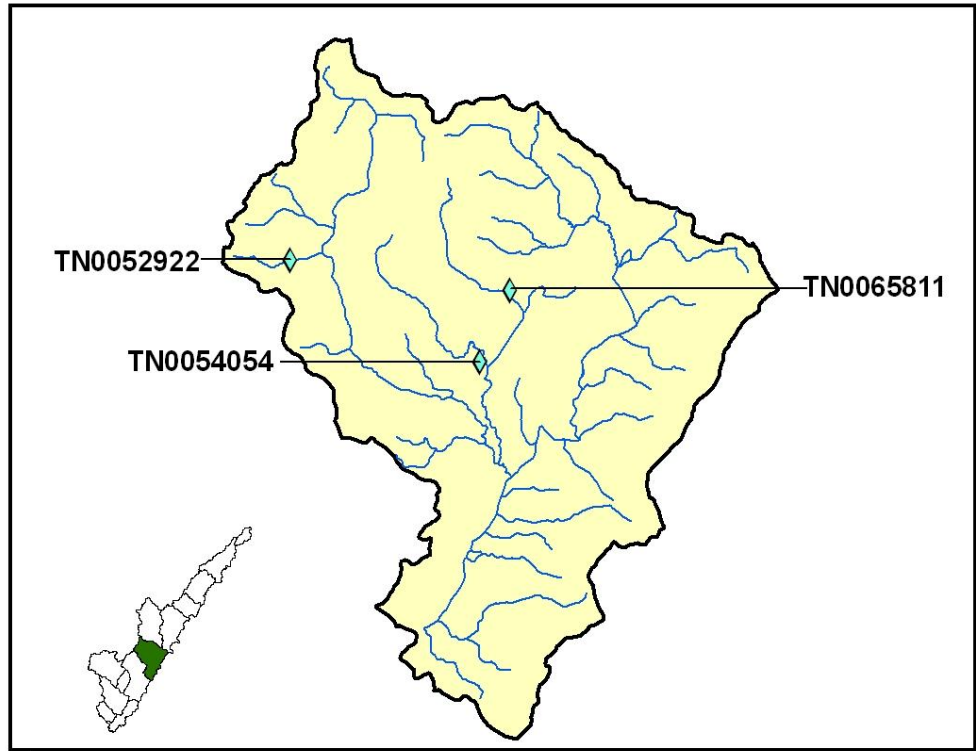


Figure 4-69. Location of Permitted Mining Facilities in Subwatershed 060200040201. More information is provided in Appendix IV.

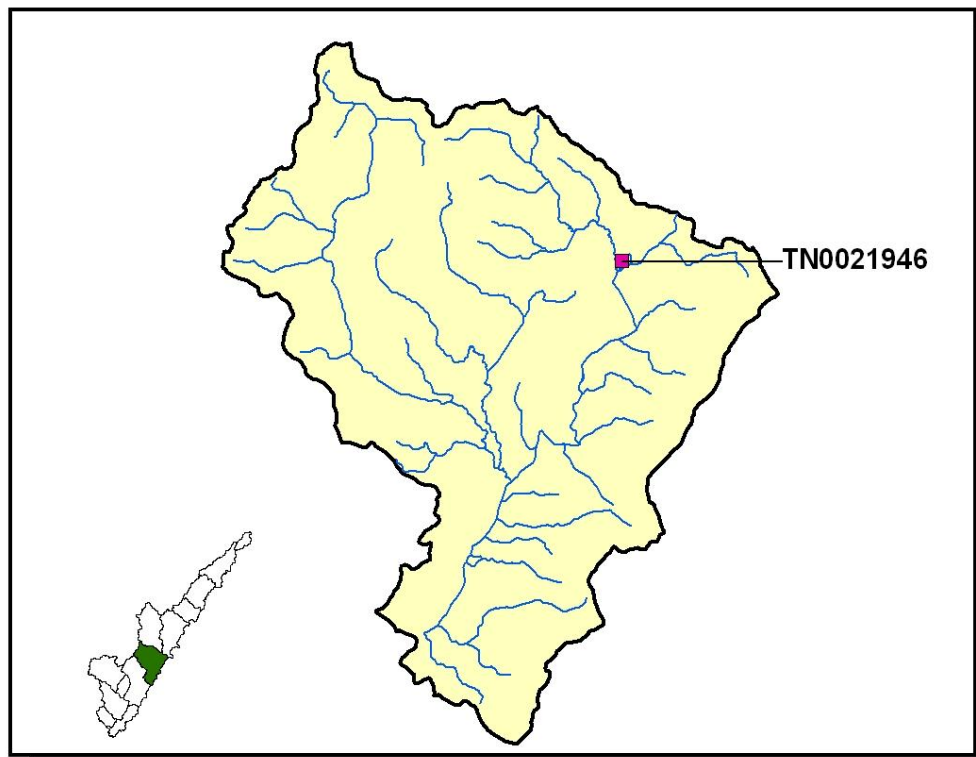


Figure 4-70. Location of Permitted Municipal and Industrial Facilities in Subwatershed 060200040201. More information, including the name of the facility is provided in Appendix IV.

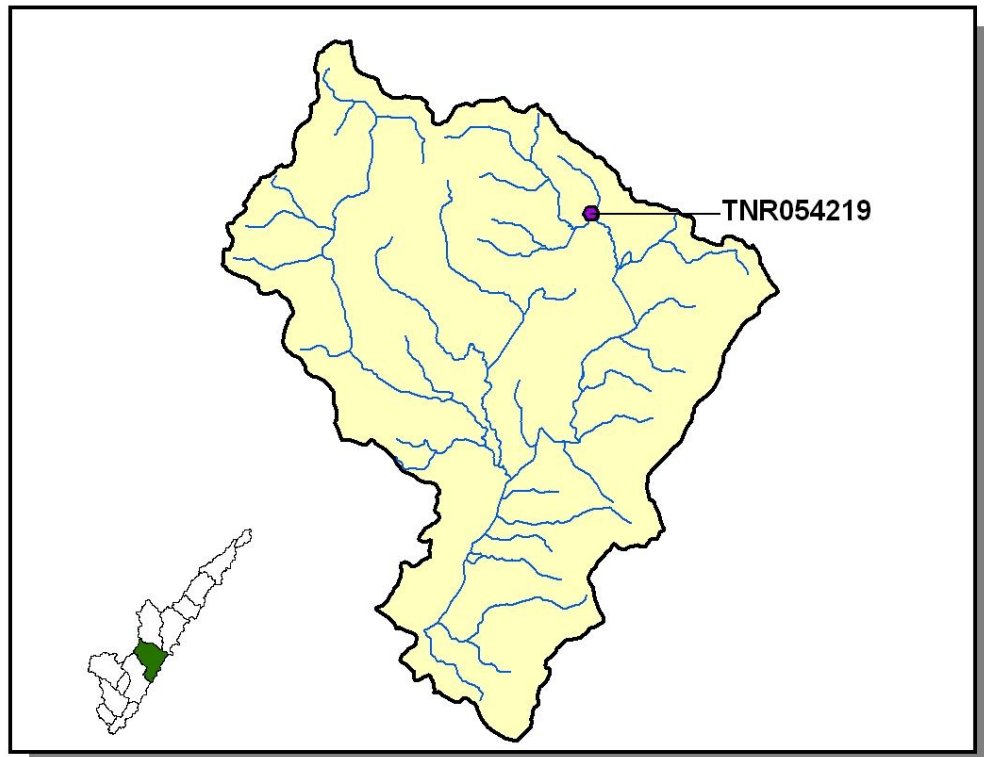


Figure 4-71. Location of TMSP (Tennessee Multi Sector Permit) Sites in Subwatershed 060200040201. More information is provided in Appendix IV.

4.2.G.iv. Nonpoint Source Contributions.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Marion	4,424	8,939	311	246	279	
Sequatchie	2,763	6,739	221	6		

Table 4-38. Summary of Livestock Count Estimates by County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

CROPS	TONS/ACRE/YEAR
Other Vegetable and Truck Crop	7.28
Soybeans (Row Crops)	4.56
Corn (Row Crops)	2.52
Grass Forbs Legumes Mixed (Pastureland)	1.10
Grass (Pastureland)	1.07
Grass (Hayland)	0.47
Other (Horticultural)	0.29
Legume Grass (Hayland)	0.22
Farmsteads and Ranch Headquarters	0.11

Table 4-39. Annual Estimated Total Soil Loss in Subwatershed 060200040201.

4.2.H. 060200040202 (Sequatchie River).

4.2.H.i. General Description.

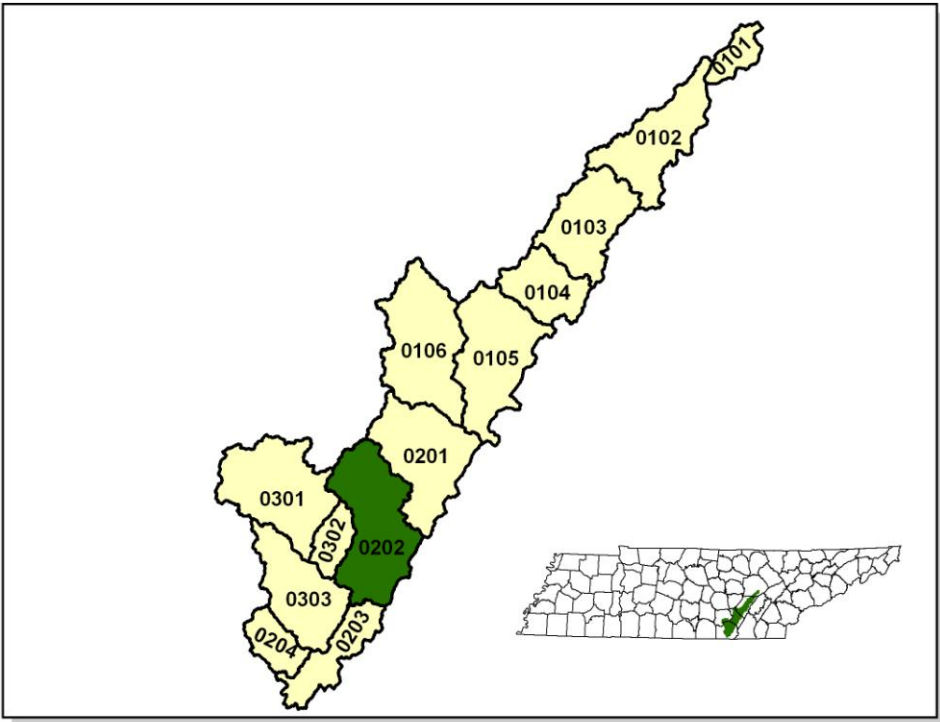


Figure 4-72. Location of Subwatershed 060200040202. All Sequatchie River HUC-12 subwatershed boundaries are shown for reference.

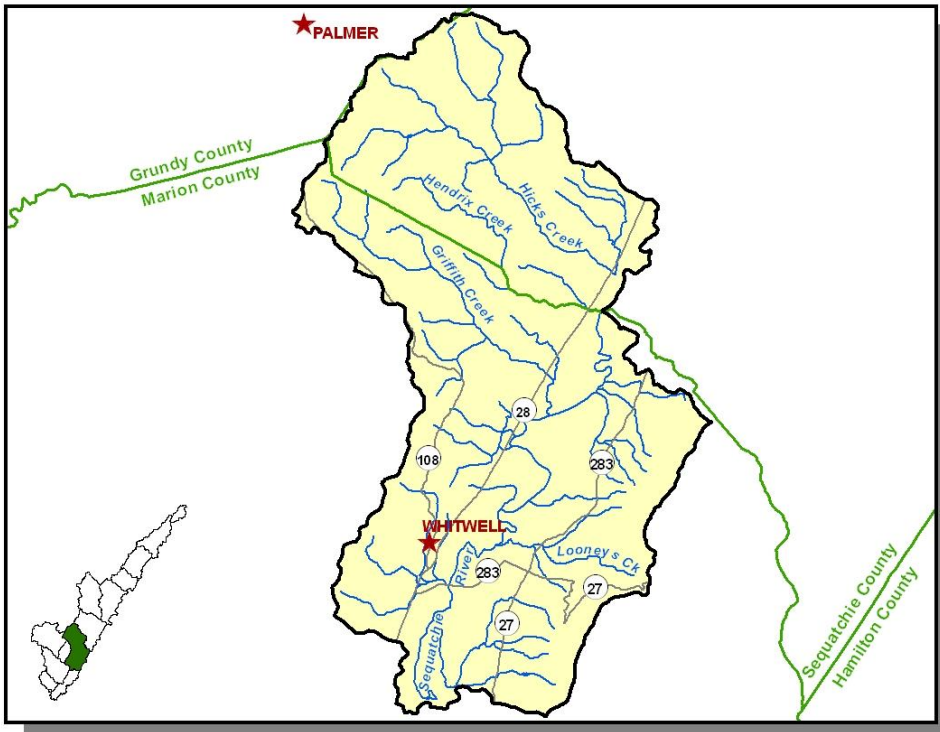


Figure 4-73. Locational Details of Subwatershed 060200040202.

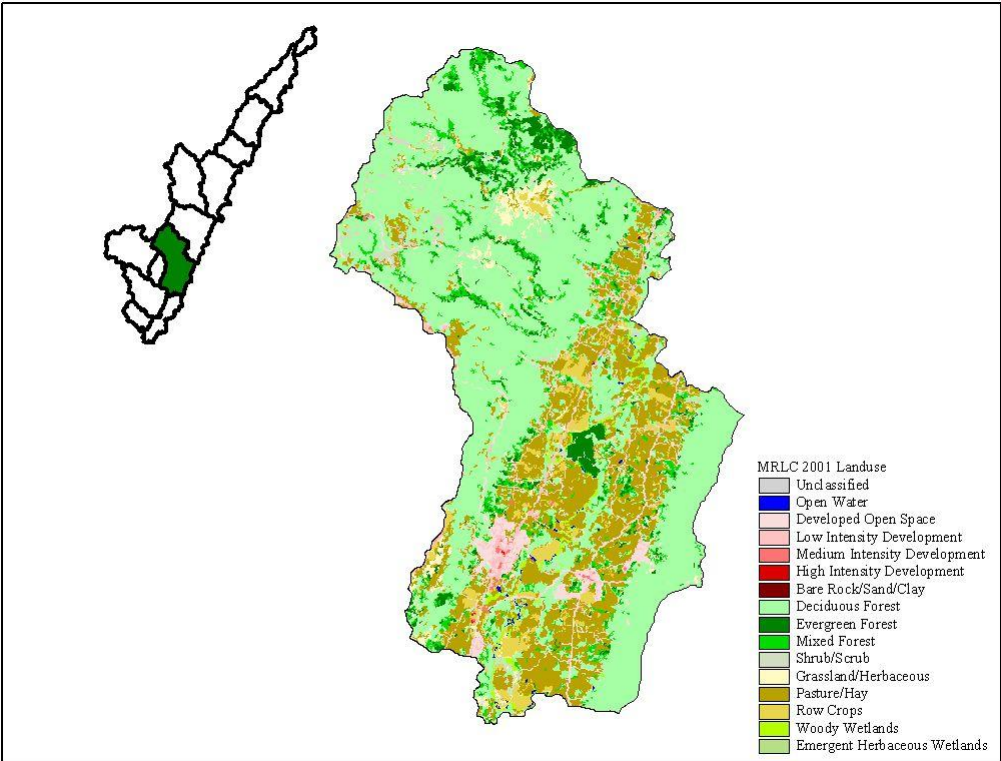


Figure 4-74. Illustration of Land Use Distribution in Subwatershed 060200040202.

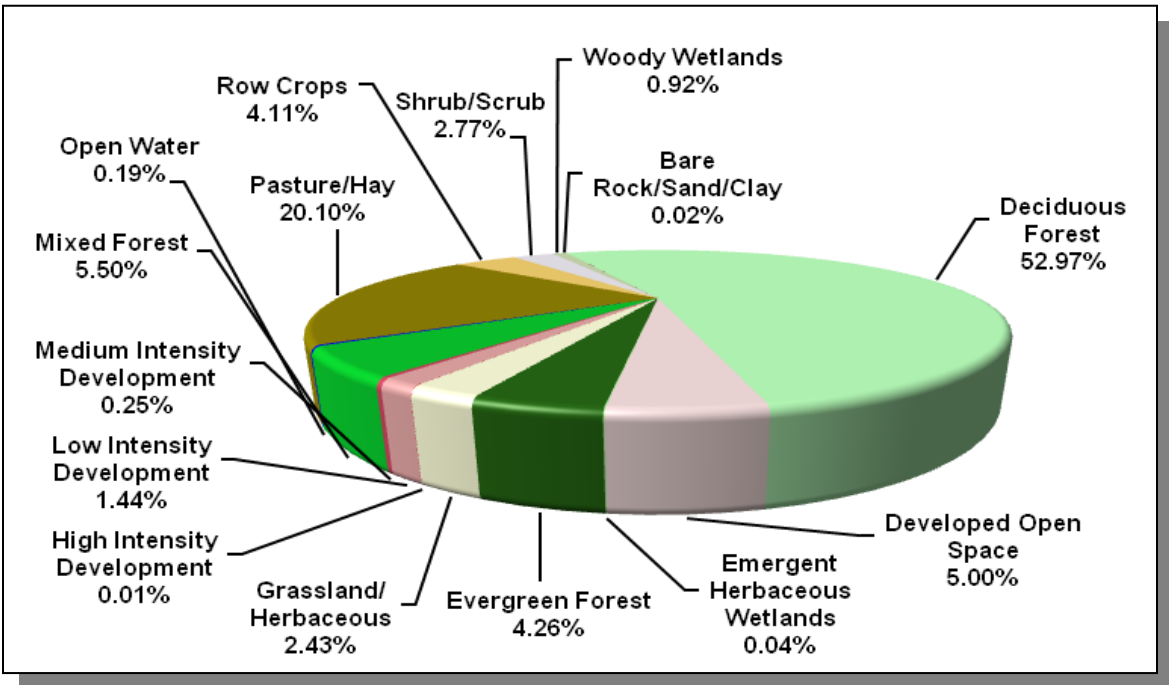


Figure 4-75. Land Use Distribution in Subwatershed 060200040202. More information is provided in Appendix IV.

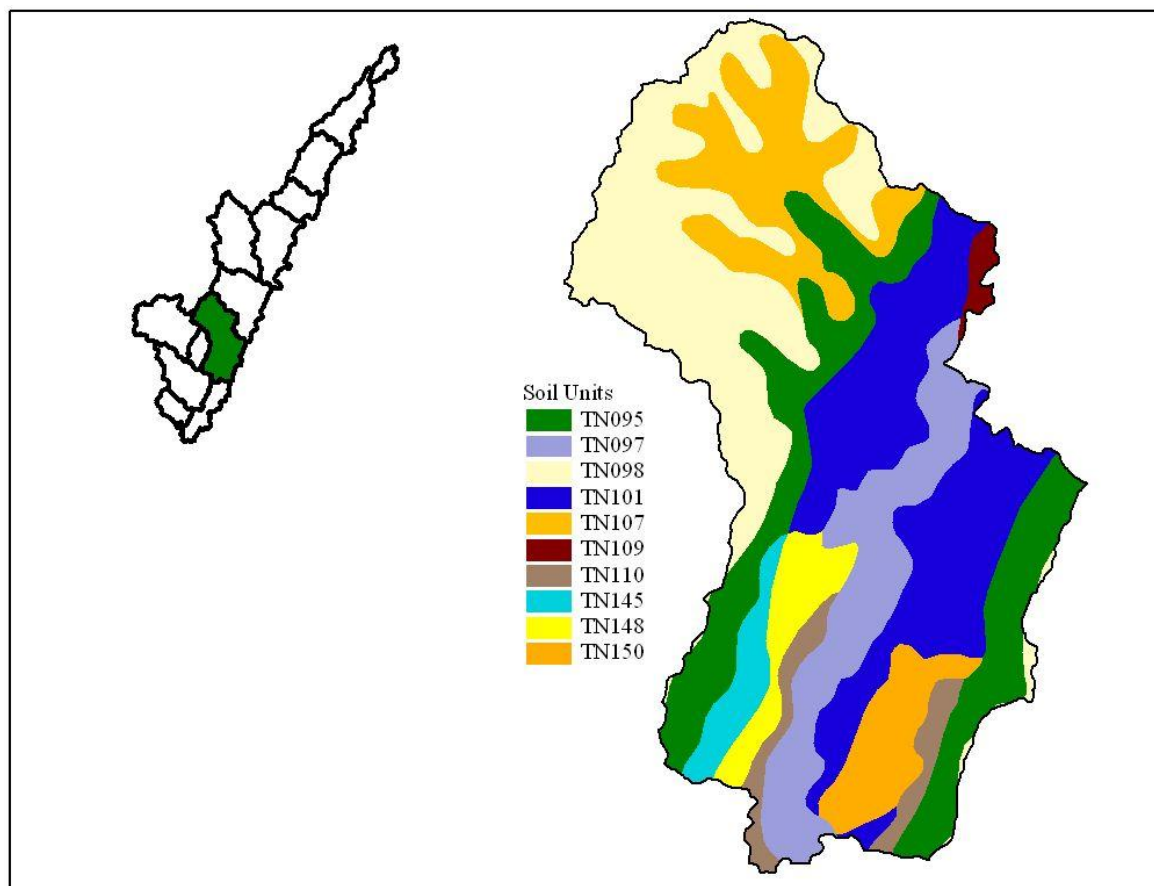


Figure 4-76. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040202.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	B	2.35	5.12	Loam	0.31
TN097	0.00	B	1.62	5.55	Loam	0.32
TN098	1.00	C	3.98	4.82	Loam	0.32
TN101	0.00	B	1.71	5.39	Loam	0.35
TN107	1.00	C	6.34	4.84	Loam	0.28
TN109	0.00	B	8.40	5.01	Sandy Loam	0.28
TN110	0.00	B	2.22	4.96	Loam	0.31
TN145	0.00	B	1.84	4.83	Loam	0.27
TN148	5.00	B	1.37	4.84	Loam	0.28
TN150	6.00	C	1.68	5.63	Silty Loam	0.32

Table 4-40. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040202. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			% of County in Watershed	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Marion	24,860	26,674	27,776	10.22	2,540	2,725	2,838	11.70
Sequatchie	8,863	10,119	11,370	6.79	602	687	772	28.20
Totals	33,723	36,793	39,146		3,142	3,412	3,610	14.90

Table 4-41. Population Estimates in Subwatershed 060200040202.

			NUMBER OF HOUSING UNITS			
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Powells Crossroads	Marion	1,098	395	9	380	6
Whitwell	Marion	1,622	689	62	625	2

Table 4-42. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 060200040202.

4.2.H.ii USGS Gaging Stations and STORET Sites.

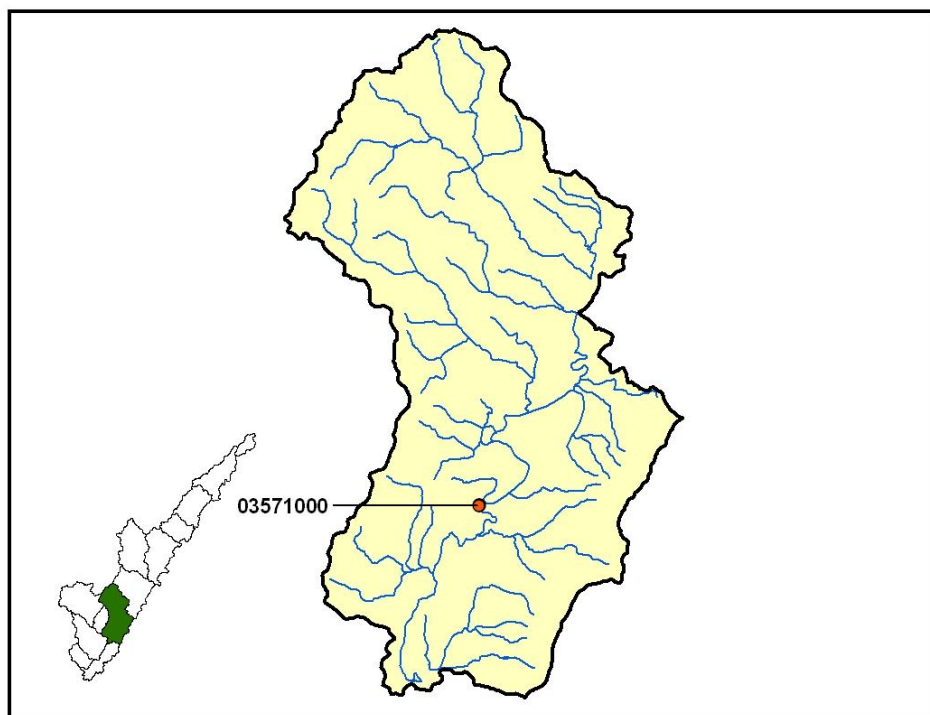


Figure 4-77. Location of USGS Continuous Record Gaging Stations in Subwatershed 060200040202. More information is provided in Appendix IV.

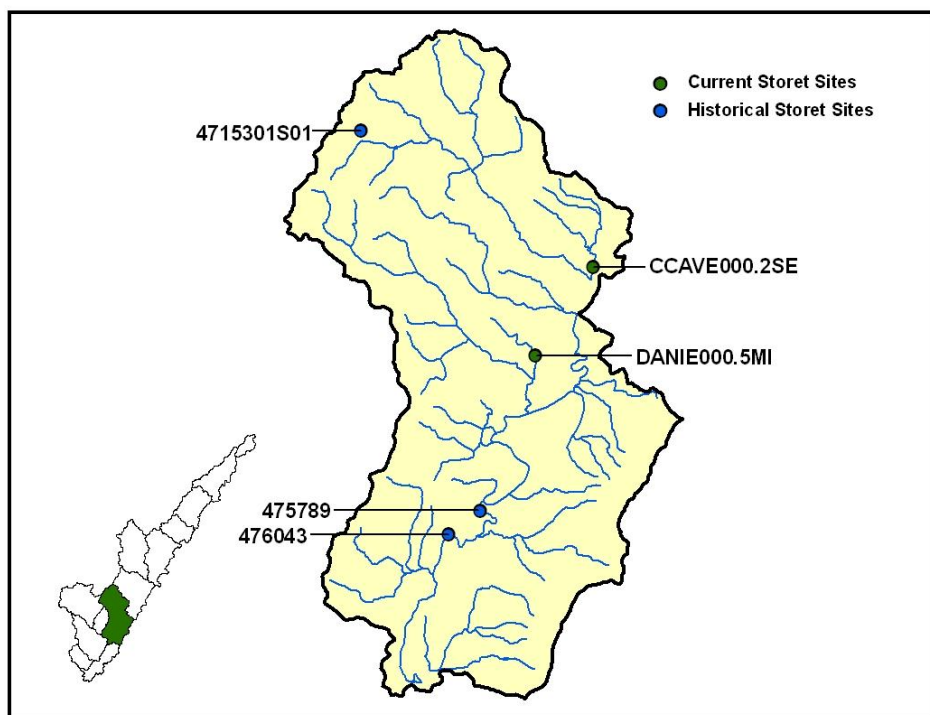


Figure 4-78. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060200040202. More information, including site names and locations, is provided in Appendix IV.

4.2.H.iii. Permitted Activities.

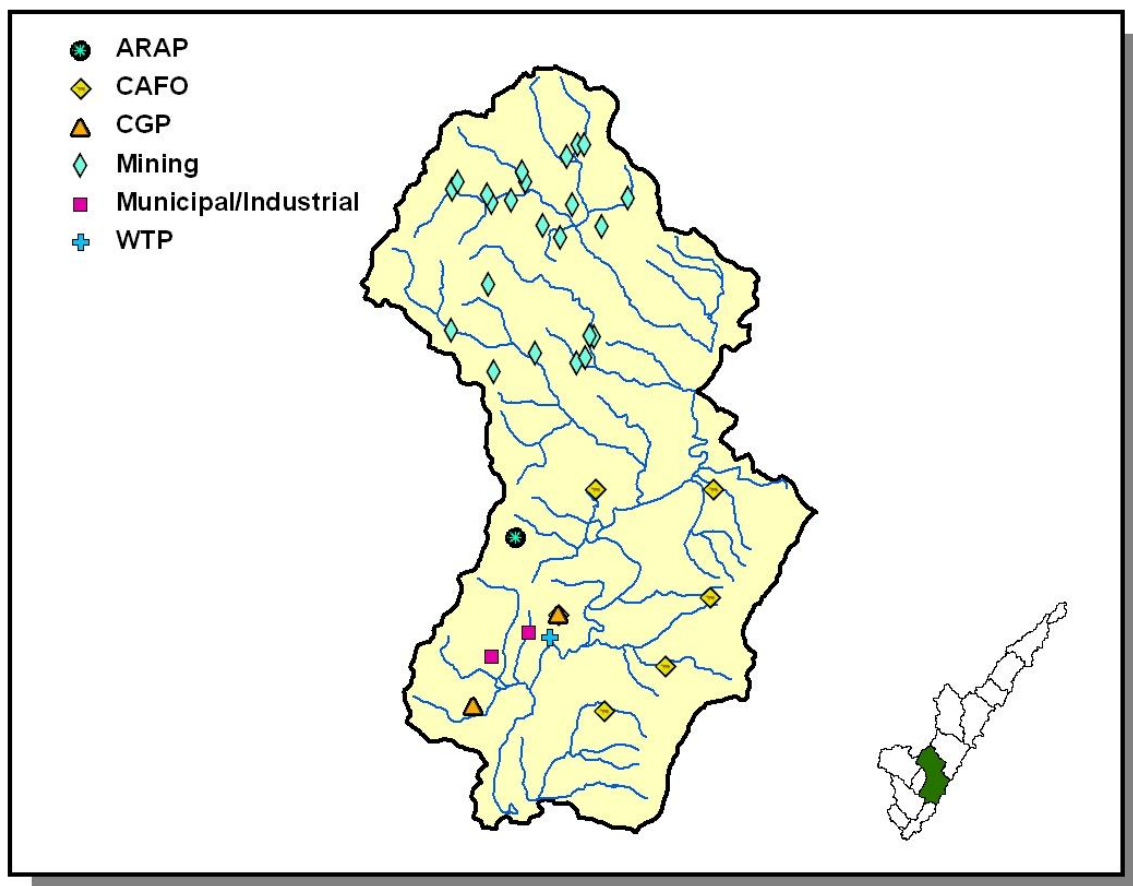


Figure 4-79. Location of Permits Issued in Subwatershed 060200040202. More information, including the names of facilities, is provided in Appendix IV.

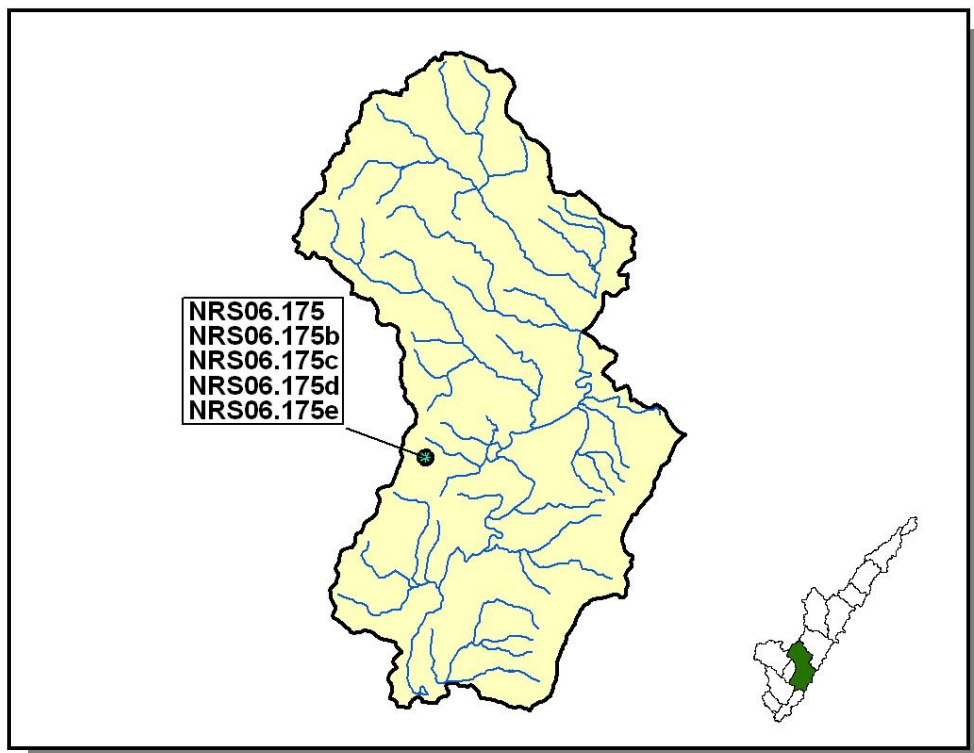


Figure 4-80. Location of ARAP (Aquatic Resource Alteration Permit) Sites in Subwatershed 060200040202. More information is provided in Appendix IV.

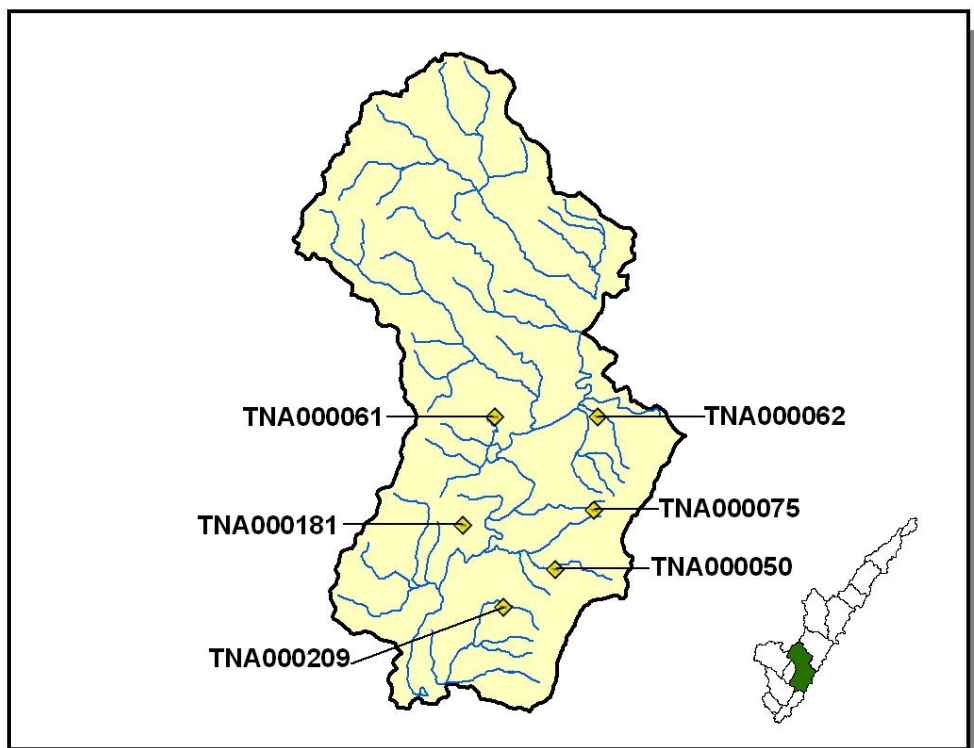


Figure 4-81. Location of CAFO (Concentrated Animal Feed Operation) Permit Sites in Subwatershed 060200040202. More information, including the names of facilities, is provided in Appendix IV.

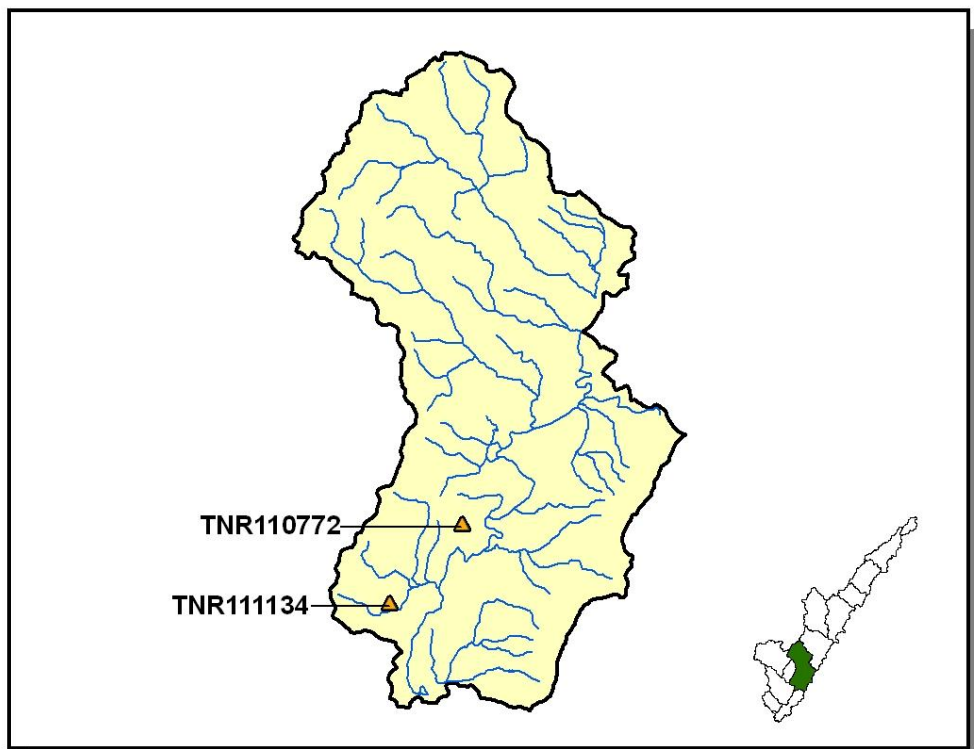


Figure 4-82. Location of CGP (Construction General Permit) Sites in Subwatershed 060200040202. More information is provided in Appendix IV.

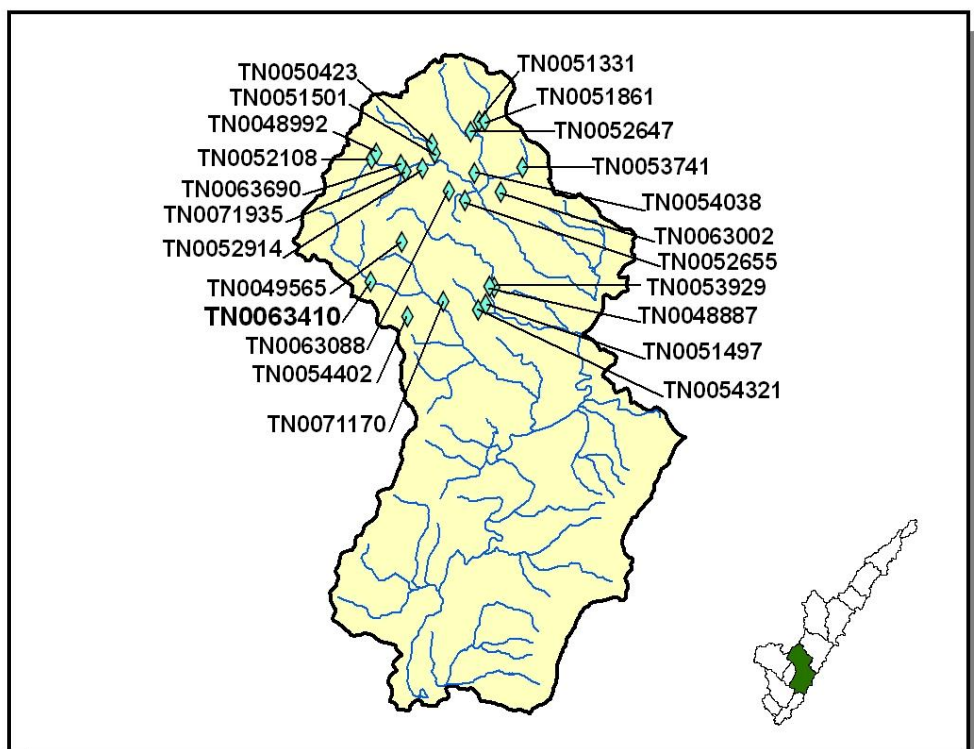


Figure 4-83. Location of Permitted Mining Facilities in Subwatershed 060200040202. More information is provided in Appendix IV.

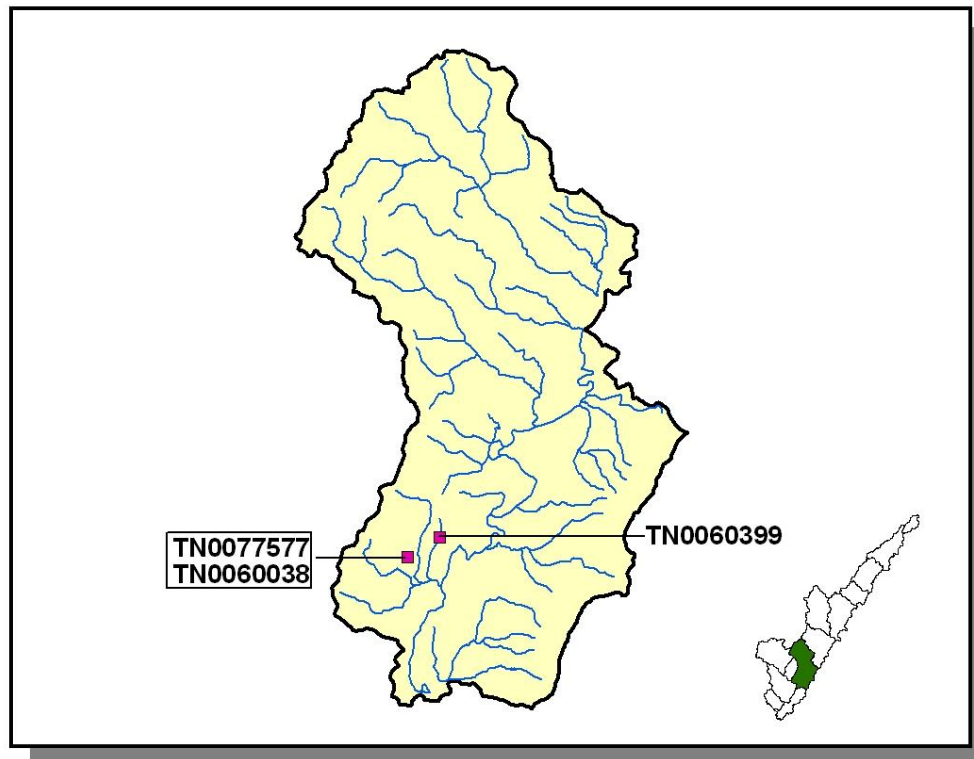


Figure 4-84. Location of Permitted Municipal and Industrial Facilities in Subwatershed 060200040202. More information, including the name of the facility is provided in Appendix IV.

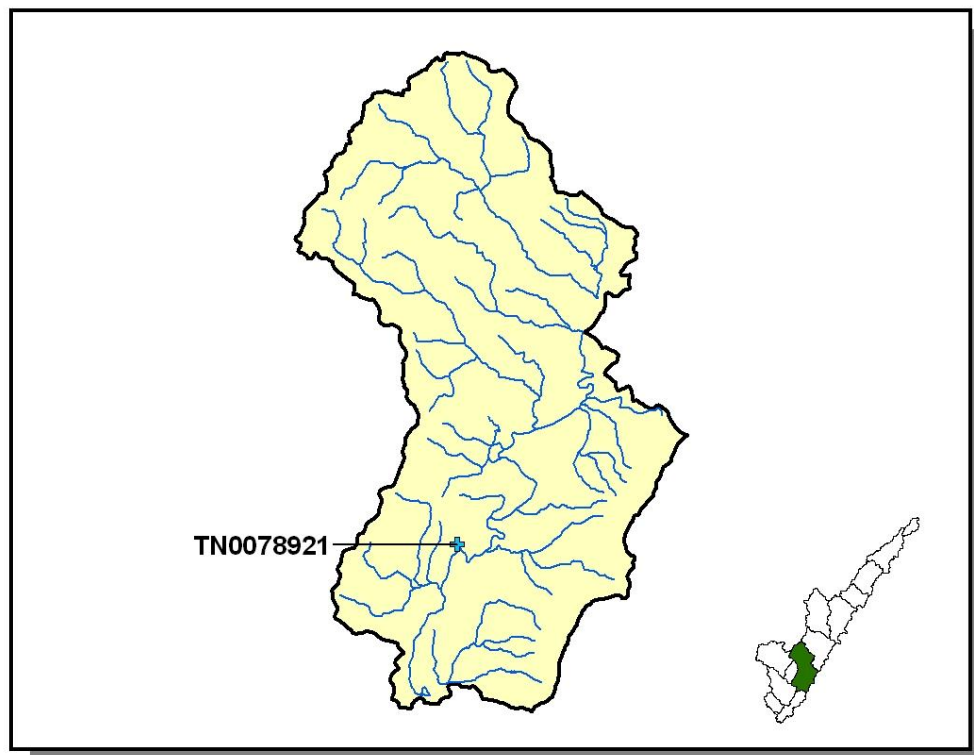


Figure 4-85. Location of Active WTP Facilities in Subwatershed 060200040202. More information, including the names of facilities, is provided in Appendix IV.

4.2.H.iv. Nonpoint Source Contributions.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Marion	4,424	8,939	311	246	279	
Sequatchie	2,763	6,739	221	6		

Table 4-43. Summary of Livestock Count Estimates by County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

CROPS	TONS/ACRE/YEAR
Other Vegetable and Truck Crop	7.28
Soybeans (Row Crops)	4.56
Corn (Row Crops)	3.28
Grass (Pastureland)	0.74
Grass Forbs Legumes Mixed (Pastureland)	0.51
Grass (Hayland)	0.47
Other (Horticultural)	0.29
Legume Grass (Hayland)	0.22
Farmsteads and Ranch Headquarters	0.17

Table 4-44. Annual Estimated Total Soil Loss in Subwatershed 060200040202.

4.2.I. 060200040203 (Sequatchie River).

4.2.I.i. General Description.

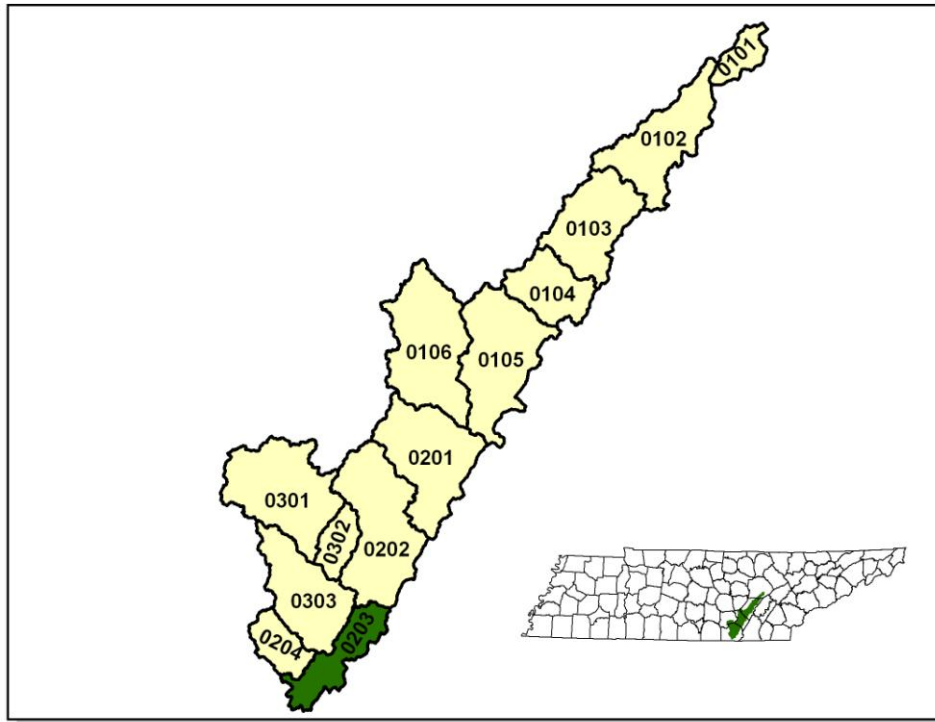


Figure 4-86. Location of Subwatershed 060200040203. All Sequatchie River HUC-12 subwatershed boundaries are shown for reference.

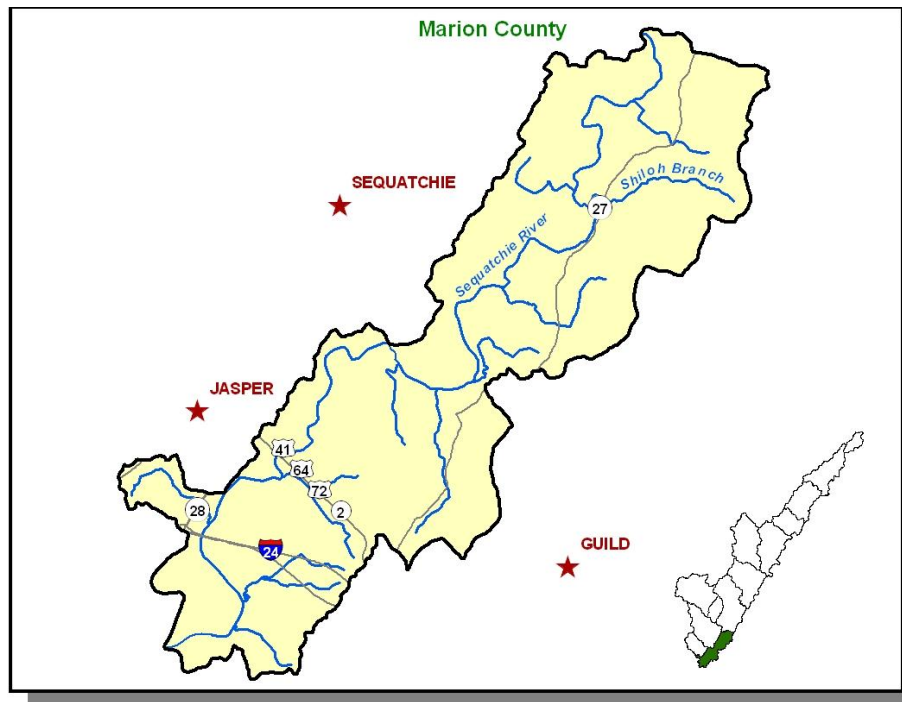


Figure 4-87. Locational Details of Subwatershed 060200040203.

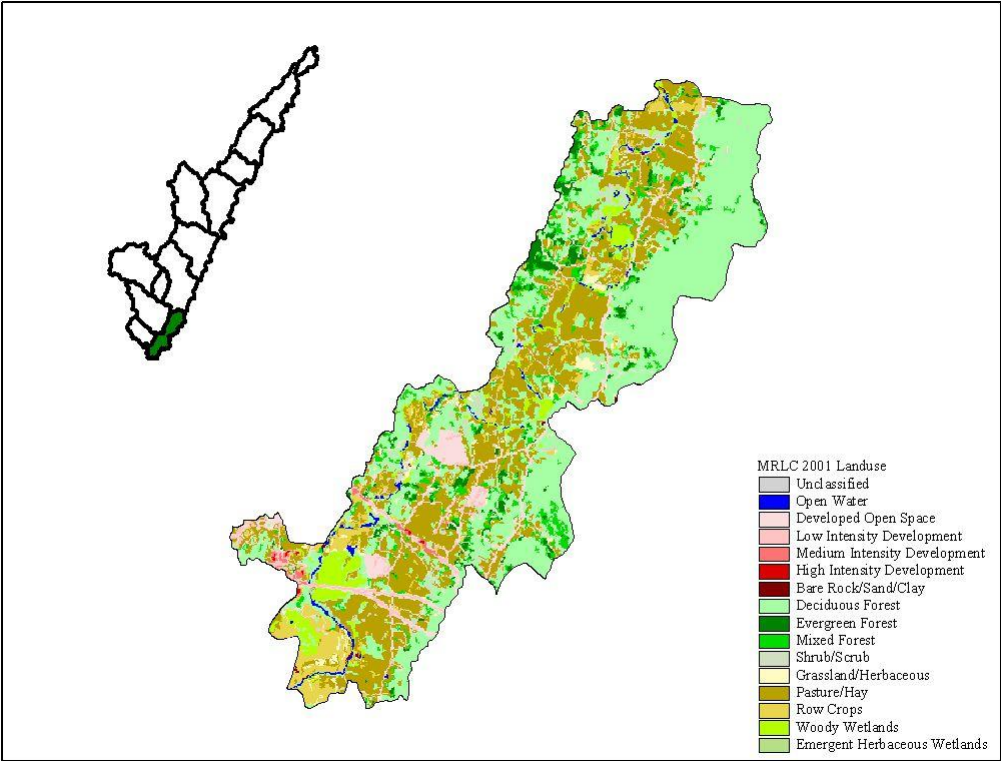


Figure 4-88. Illustration of Land Use Distribution in Subwatershed 060200040203.

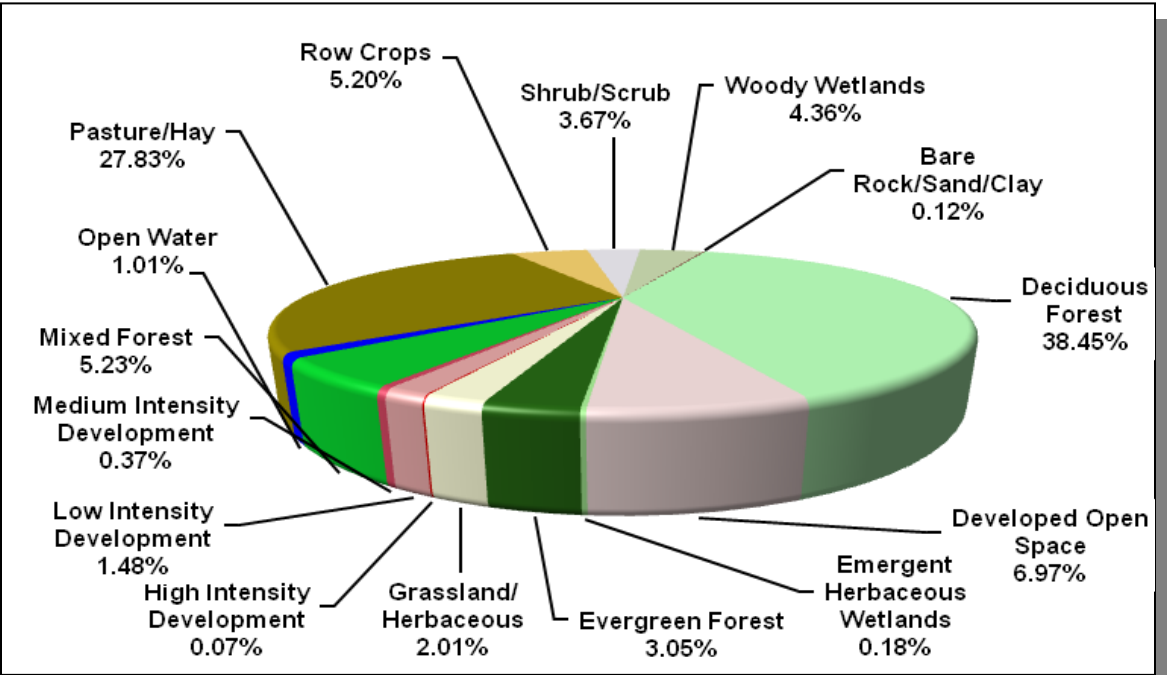


Figure 4-89. Land Use Distribution in Subwatershed 060200040203. More information is provided in Appendix IV.

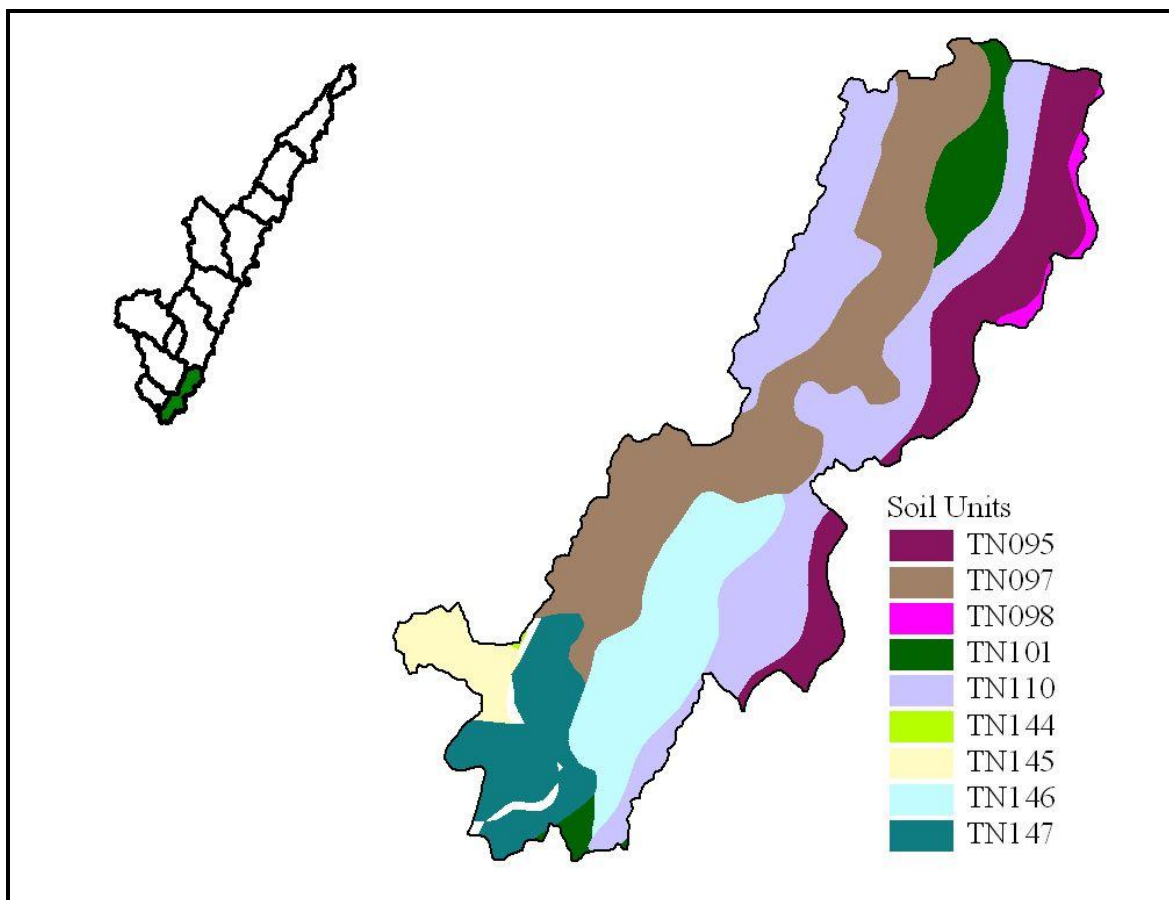


Figure 4-90. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040203.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	B	2.35	5.12	Loam	0.31
TN097	0.00	B	1.62	5.55	Loam	0.32
TN098	1.00	C	3.98	4.82	Loam	0.32
TN101	0.00	B	1.71	5.39	Loam	0.35
TN110	0.00	B	2.22	4.96	Loam	0.31
TN144	0.00	B	2.43	5.43	Loam	0.31
TN145	0.00	B	1.84	4.83	Loam	0.27
TN146	7.00	C	1.30	5.39	Silty Loam	0.37
TN147	41.00	C	1.30	5.95	Silty Loam	0.38

Table 4-45. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040203. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			% of County in Watershed	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Marion	24,860	26,674	27,776	5.76	1,433	1,538	1,601	11.70

Table 4-46. Population Estimates in Subwatershed 060200040203.

			NUMBER OF HOUSING UNITS			
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Jasper	Marion	2,780	1,199	966	225	8
Kimball	Marion	1,243	507	54	448	5
Total		4,023	1,706	1,020	673	13

Table 4-47. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 060200040203.

4.2.1.ii USGS Gaging Stations and STORET Sites.

There are no USGS continuous record gaging stations located in subwatershed 060200040203.

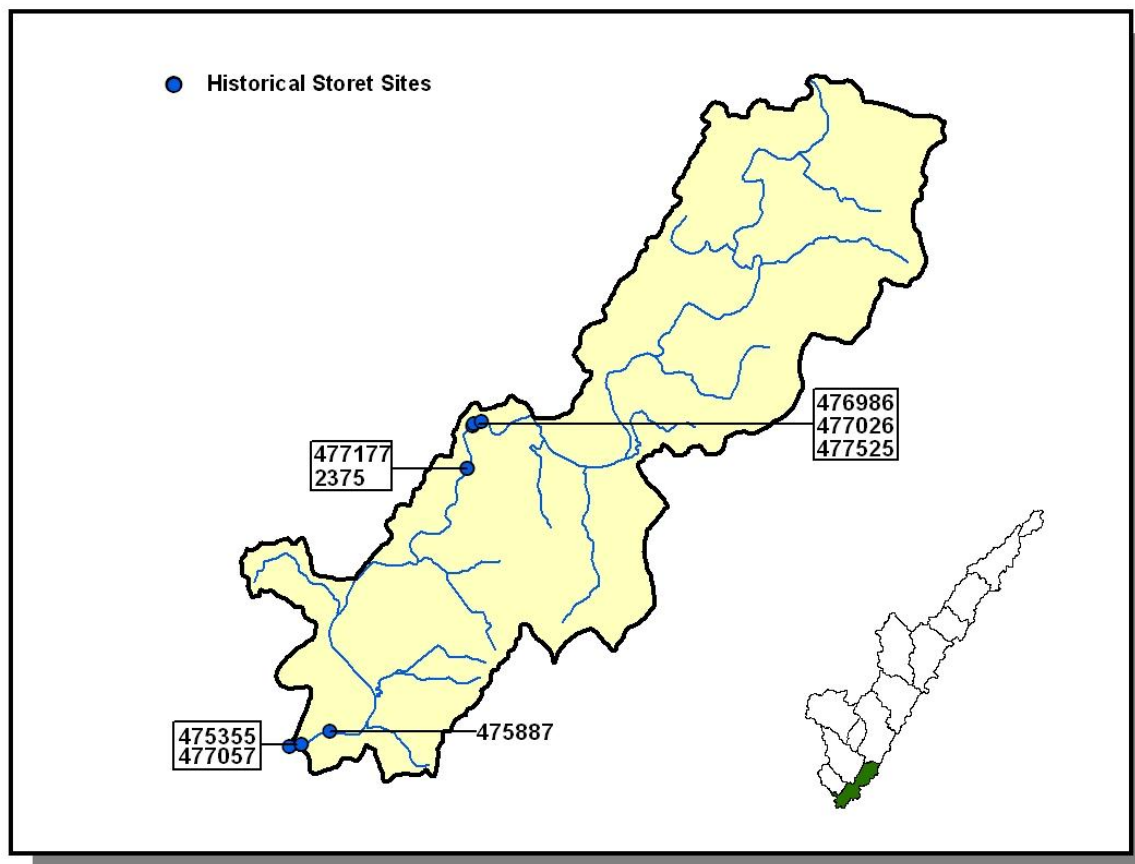


Figure 4-91. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060200040203. More information, including site names and locations, is provided in Appendix IV.

4.2.1.iii. Permitted Activities.

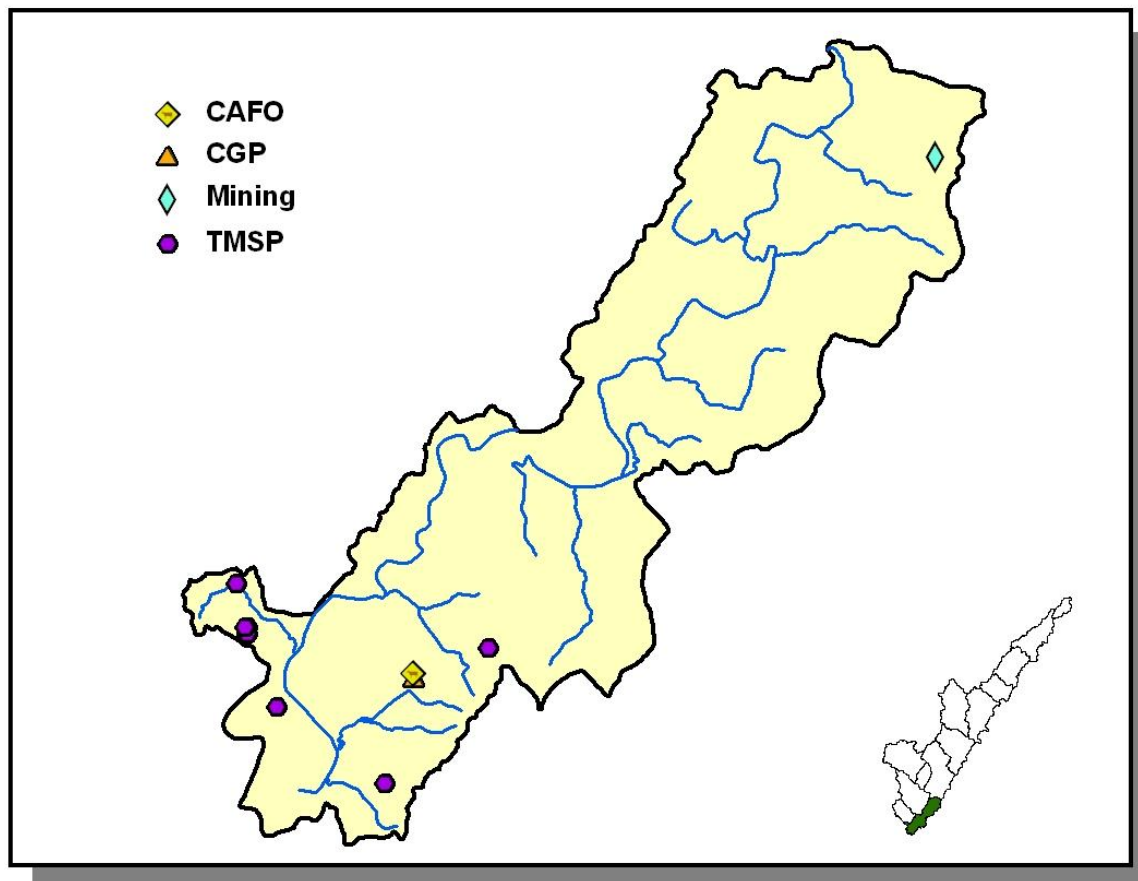


Figure 4-92. Location of Permits Issued in Subwatershed 060200040203. More information, including the names of facilities, is provided in Appendix IV.

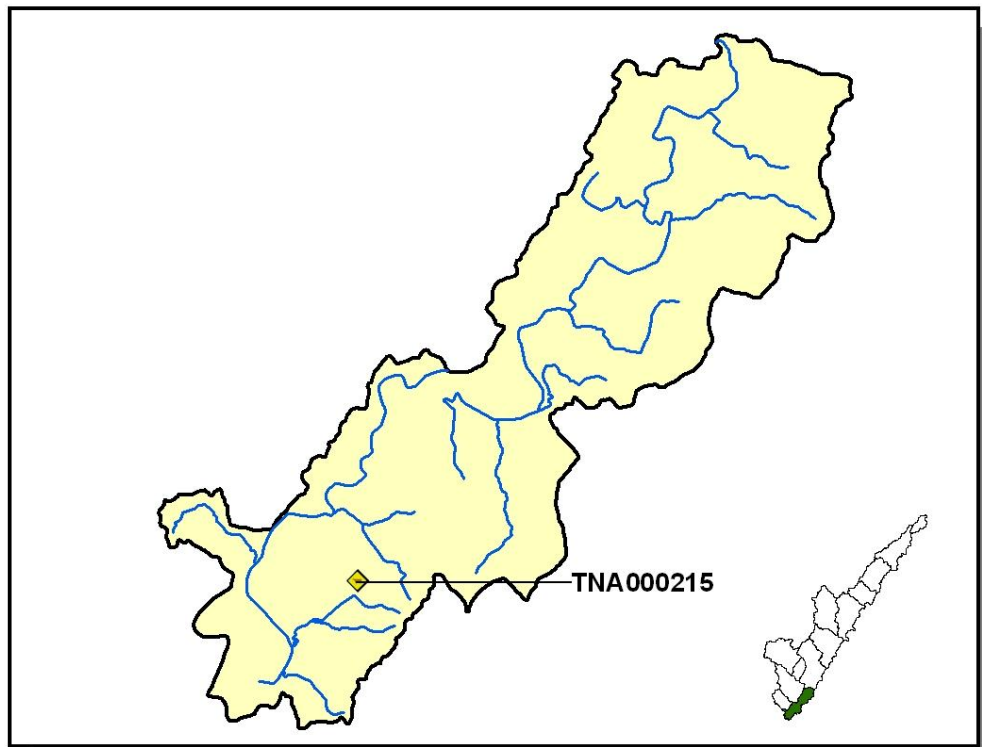


Figure 4-93. Location of CAFO (Concentrated Animal Feed Operation) Permit Sites in Subwatershed 060200040203. More information, including the names of facilities, is provided in Appendix IV.



Figure 4-94. Location of CGP (Construction General Permit) Sites in Subwatershed 060200040203. More information is provided in Appendix IV.

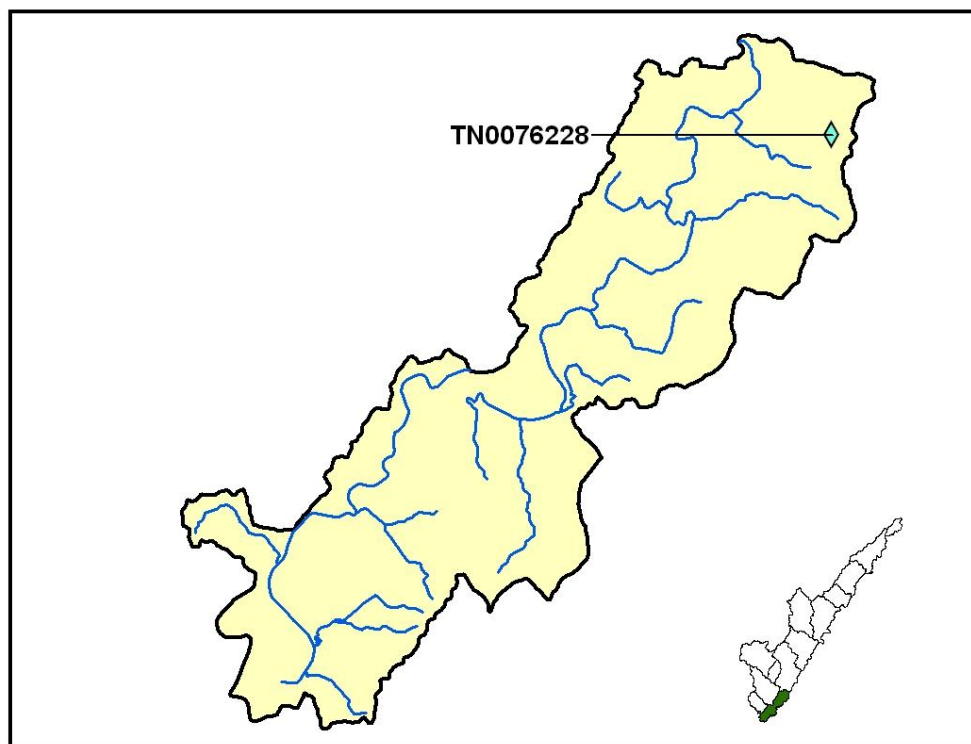


Figure 4-95. Location of Permitted Mining Facilities in Subwatershed 060200040203. More information is provided in Appendix IV.

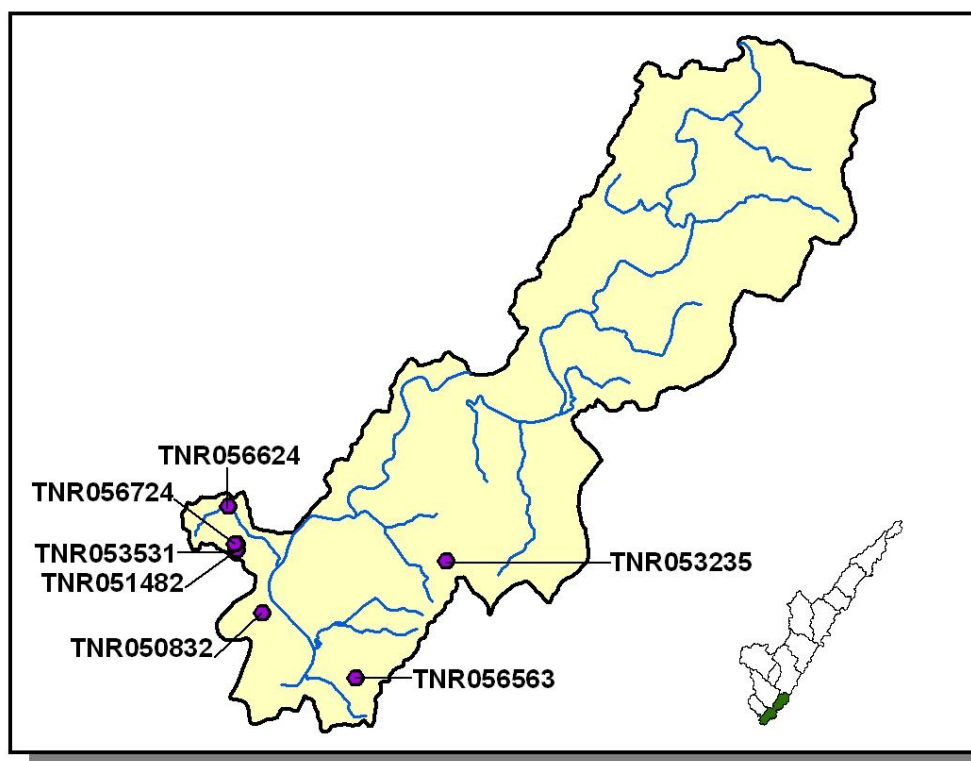


Figure 4-96. Location of TMSP (Tennessee Multi Sector Permit) Sites in Subwatershed 060200040203. More information is provided in Appendix IV.

4.2.I.iv. Nonpoint Source Contributions.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Marion	4,424	8,939	311	246	279	

Table 4-48. Summary of Livestock Count Estimates by County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

CROPS	TONS/ACRE/YEAR
Other Vegetable and Truck Crop	7.28
Soybeans (Row Crops)	4.56
Corn (Row Crops)	3.55
Grass (Pastureland)	0.62
Grass Forbs Legumes Mixed (Pastureland)	0.29
Other (Horticultural)	0.29
Farmsteads and Ranch Headquarters	0.19
Other Vegetable and Truck Crop	7.28
Soybeans (Row Crops)	4.56
Corn (Row Crops)	3.55
Grass (Pastureland)	0.62
Grass Forbs Legumes Mixed (Pastureland)	0.29
Other (Horticultural)	0.29
Farmsteads and Ranch Headquarters	0.19

Table 4-49. Annual Estimated Total Soil Loss in Subwatershed 060200040203.

4.2.J. 060200040204 (Town Creek).

4.2.J.i. General Description.

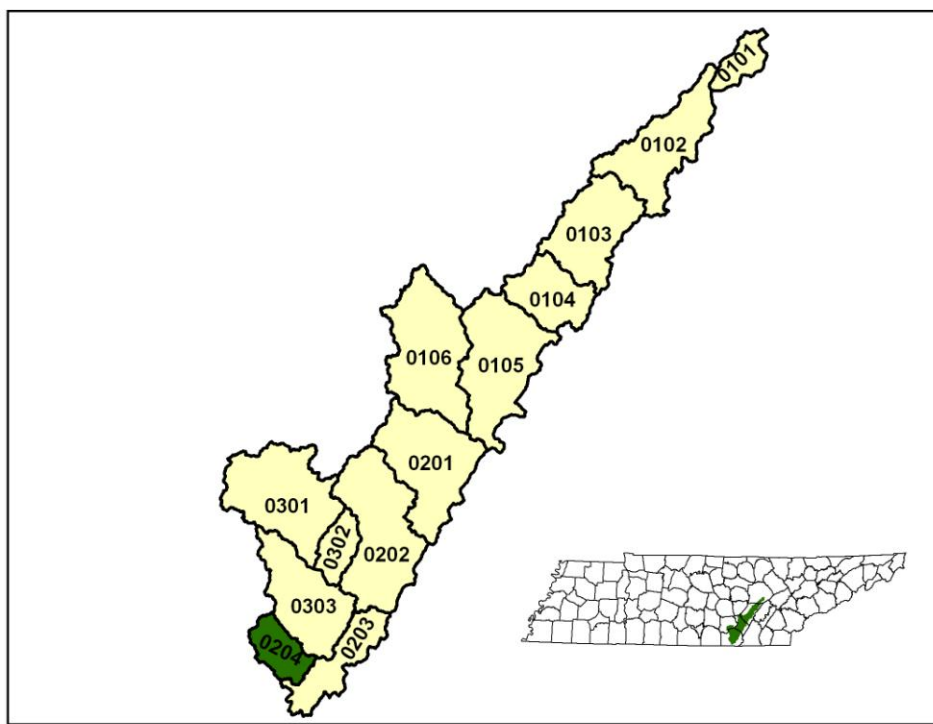


Figure 4-97. Location of Subwatershed 060200040204. All Sequatchie River HUC-12 subwatershed boundaries are shown for reference.

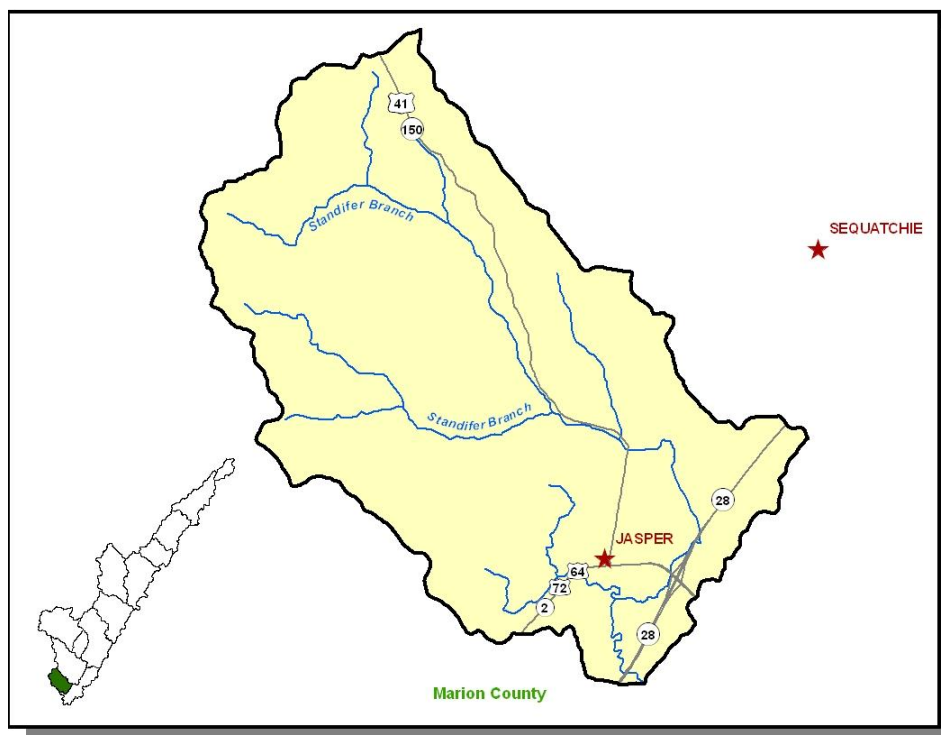


Figure 4-98. Locational Details of Subwatershed 060200040204.

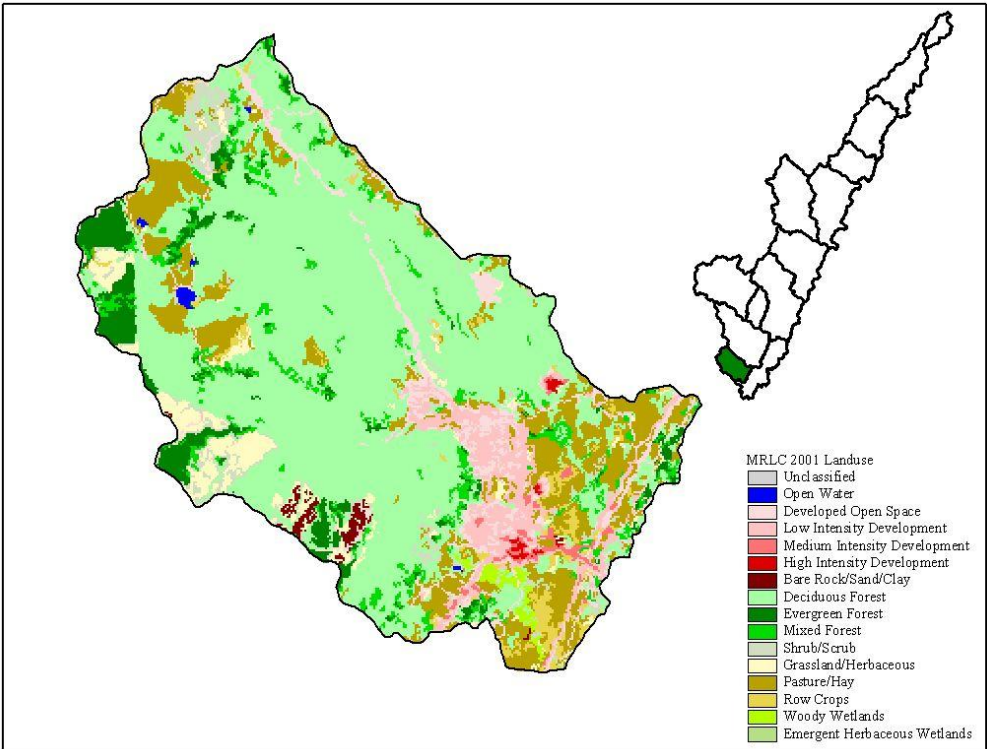


Figure 4-99. Illustration of Land Use Distribution in Subwatershed 060200040204.

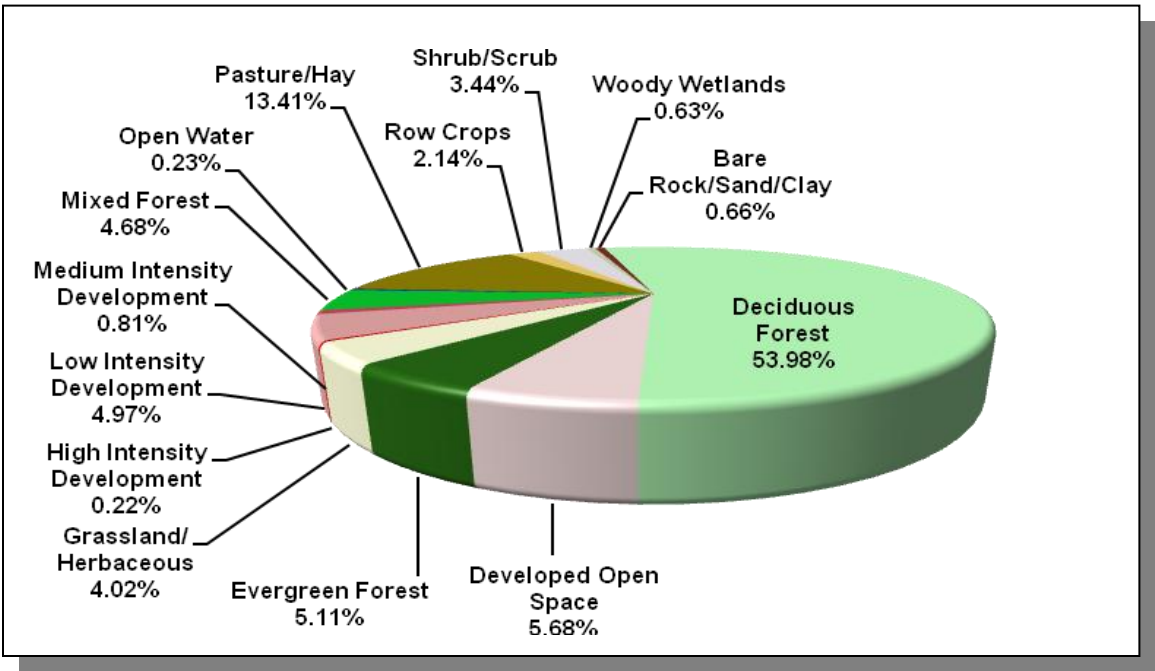


Figure 4-100. Land Use Distribution in Subwatershed 060200040204. More information is provided in Appendix IV.

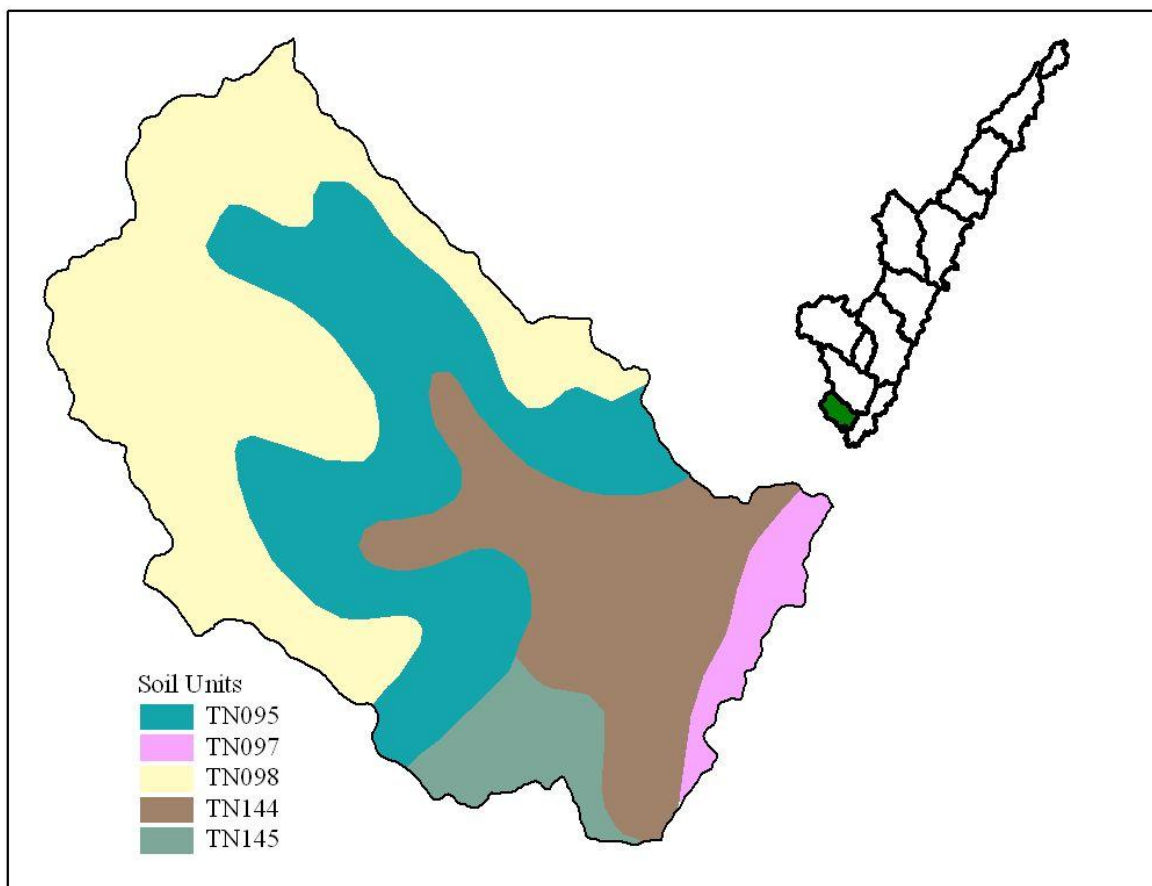


Figure 4-101. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040204.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	B	2.35	5.12	Loam	0.31
TN097	0.00	B	1.62	5.55	Loam	0.32
TN098	1.00	C	3.98	4.82	Loam	0.32
TN144	0.00	B	2.43	5.43	Loam	0.31
TN145	0.00	B	1.84	4.83	Loam	0.27

Table 4-50. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040204. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			% of County in Watershed	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Marion	24,860	26,674	27,776	3.6	894	960	999	11.7

Table 4-51. Population Estimates in Subwatershed 060200040204.

			NUMBER OF HOUSING UNITS			
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Jasper	Marion	2,780	1,199	966	225	8

Table 4-52. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 060200040204.

4.2.J.ii USGS Gaging Stations and STORET Sites.

There are no USGS continuous record gaging stations or STORET sites located in subwatershed 060200040204.

4.2.J.iii. Permitted Activities.

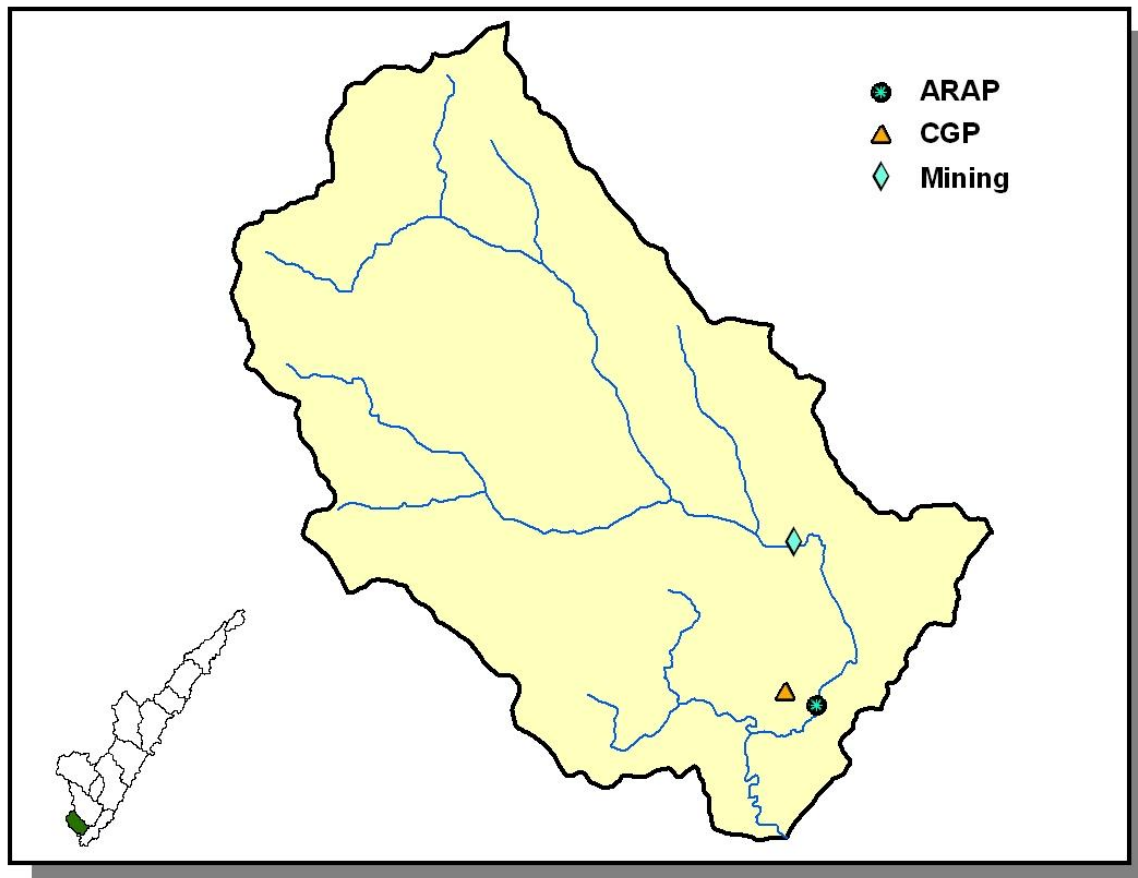


Figure 4-102. Location of Permits Issued in Subwatershed 060200040204. More information, including the names of facilities, is provided in Appendix IV.



Figure 4-103. Location of ARAP (Aquatic Resource Alteration Permit) Sites in Subwatershed 060200040204. More information is provided in Appendix IV.

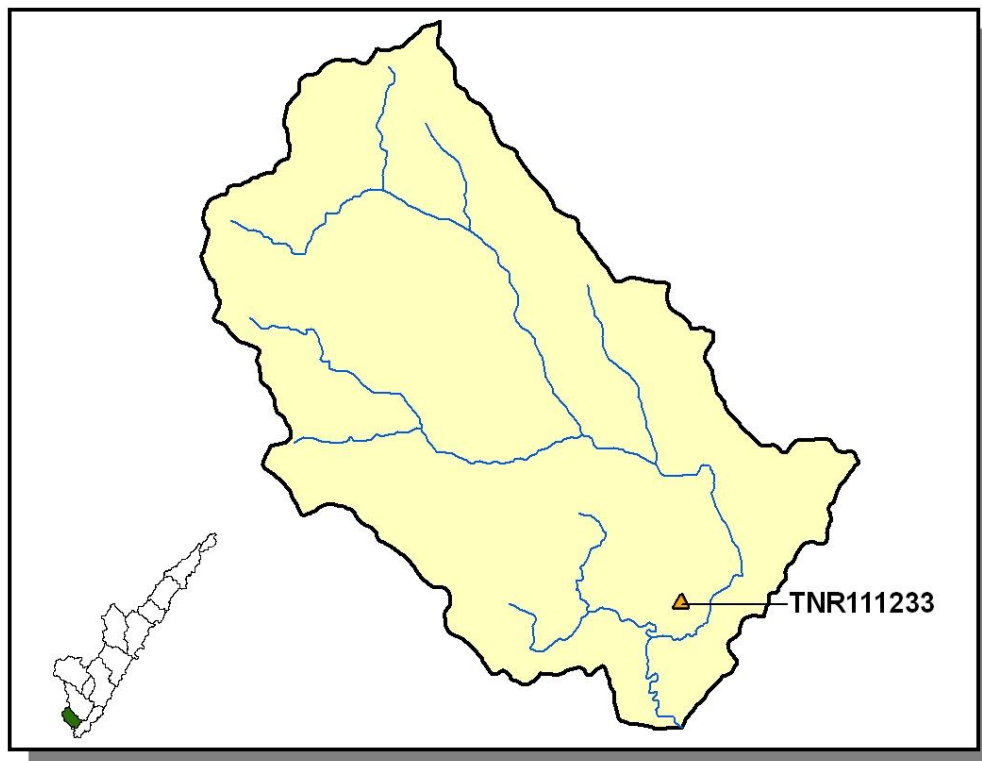


Figure 4-104. Location of CGP (Construction General Permit) Sites in Subwatershed 060200040204. More information is provided in Appendix IV.

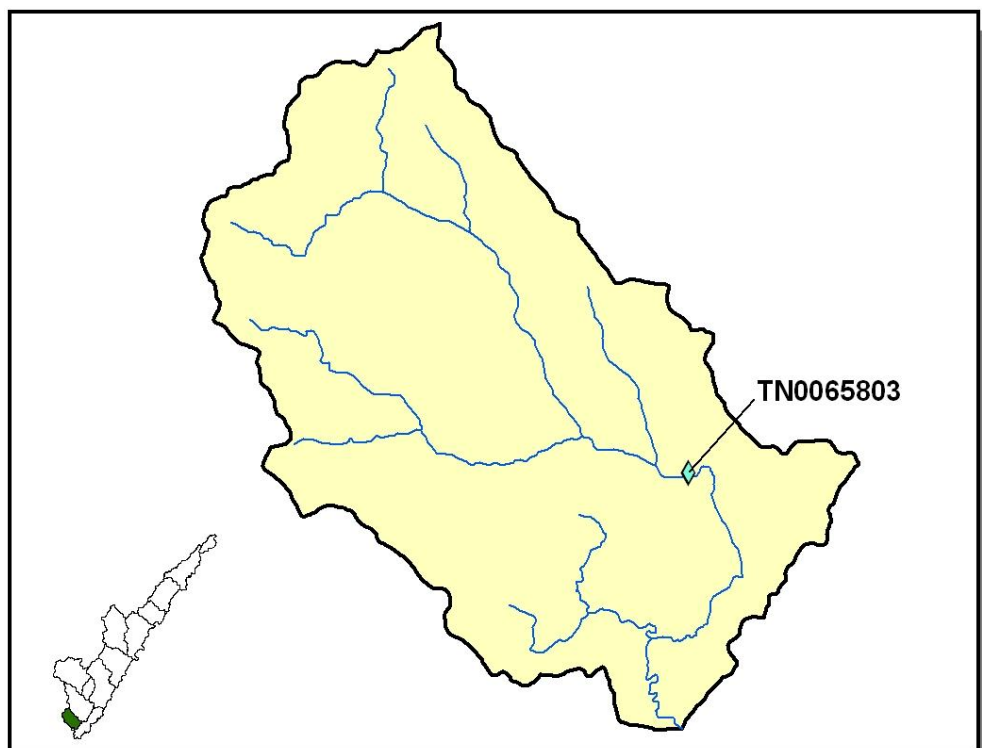


Figure 4-105. Location of Permitted Mining Facilities in Subwatershed 060200040204. More information is provided in Appendix IV.

4.2.J.iv. Nonpoint Source Contributions.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Marion	4,424	8,939	311	246	279	

Table 4-53. Summary of Livestock Count Estimates by County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

CROPS	TONS/ACRE/YEAR
Other Vegetable and Truck Crop	7.28
Soybeans (Row Crops)	4.56
Corn (Row Crops)	3.55
Grass (Pastureland)	0.62
Grass Forbs Legumes Mixed (Pastureland)	0.29
Other (Horticultural)	0.29
Farmsteads and Ranch Headquarters	0.19
Other Vegetable and Truck Crop	7.28
Soybeans (Row Crops)	4.56
Corn (Row Crops)	3.55
Grass (Pastureland)	0.62
Grass Forbs Legumes Mixed (Pastureland)	0.29
Other (Horticultural)	0.29
Farmsteads and Ranch Headquarters	0.19

Table 4-54. Annual Estimated Total Soil Loss in Subwatershed 060200040204.

4.2.K. 060200040301 (Little Sequatchie River, Upper).

4.2.K.i. General Description.

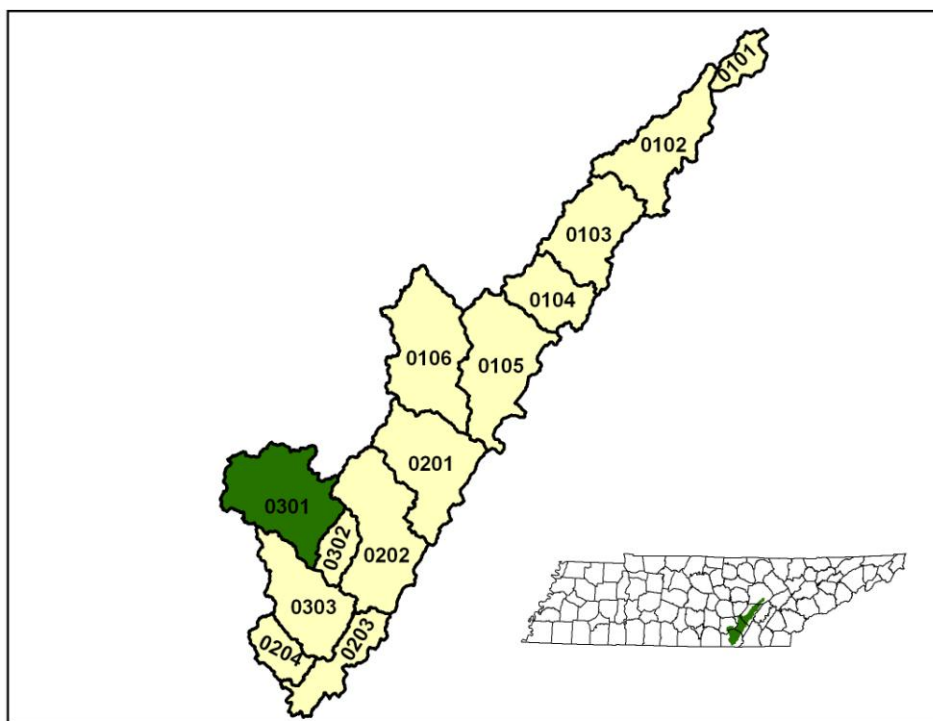


Figure 4-106. Location of Subwatershed 060200040301. All Sequatchie River HUC-12 subwatershed boundaries are shown for reference.

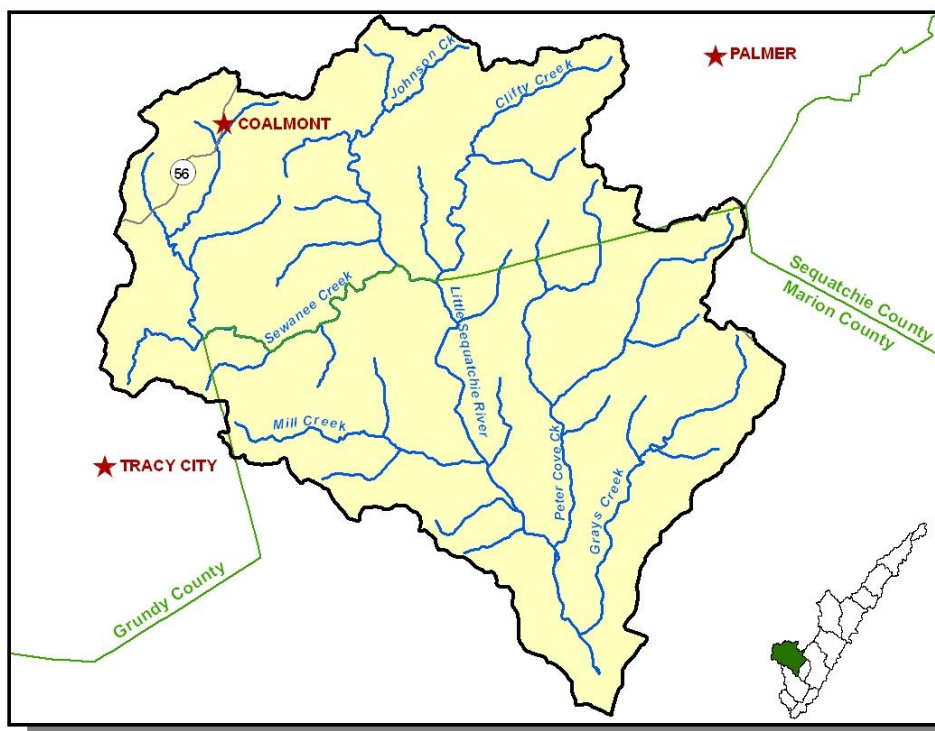


Figure 4-107. Locational Details of Subwatershed 060200040301.

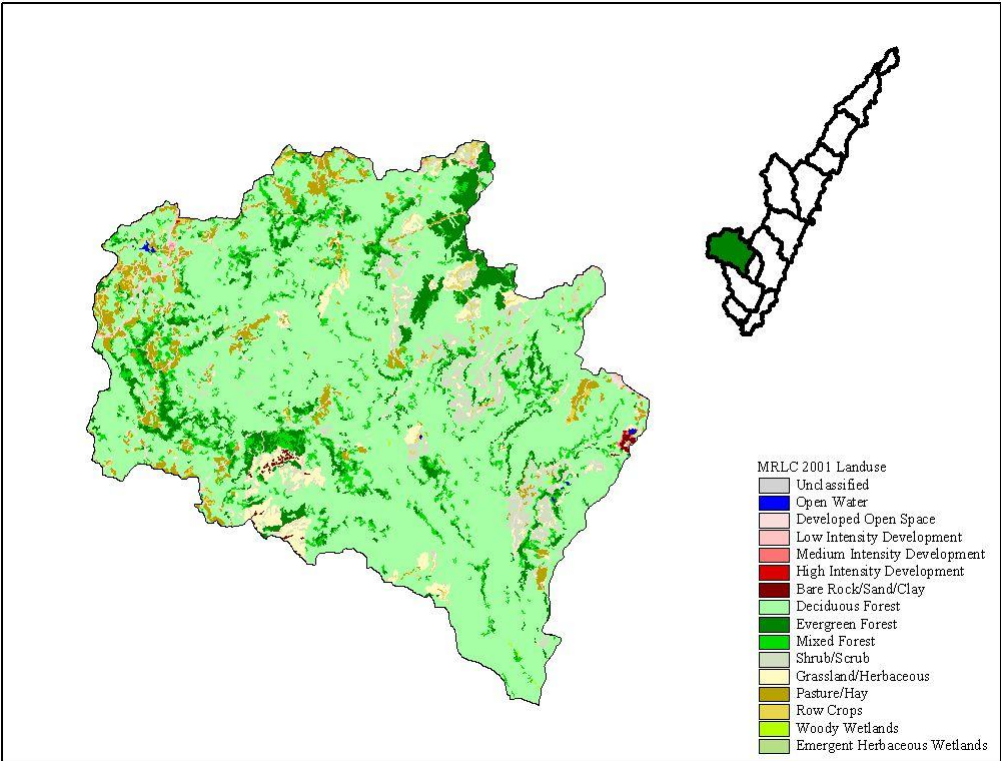


Figure 4-108. Illustration of Land Use Distribution in Subwatershed 060200040301.

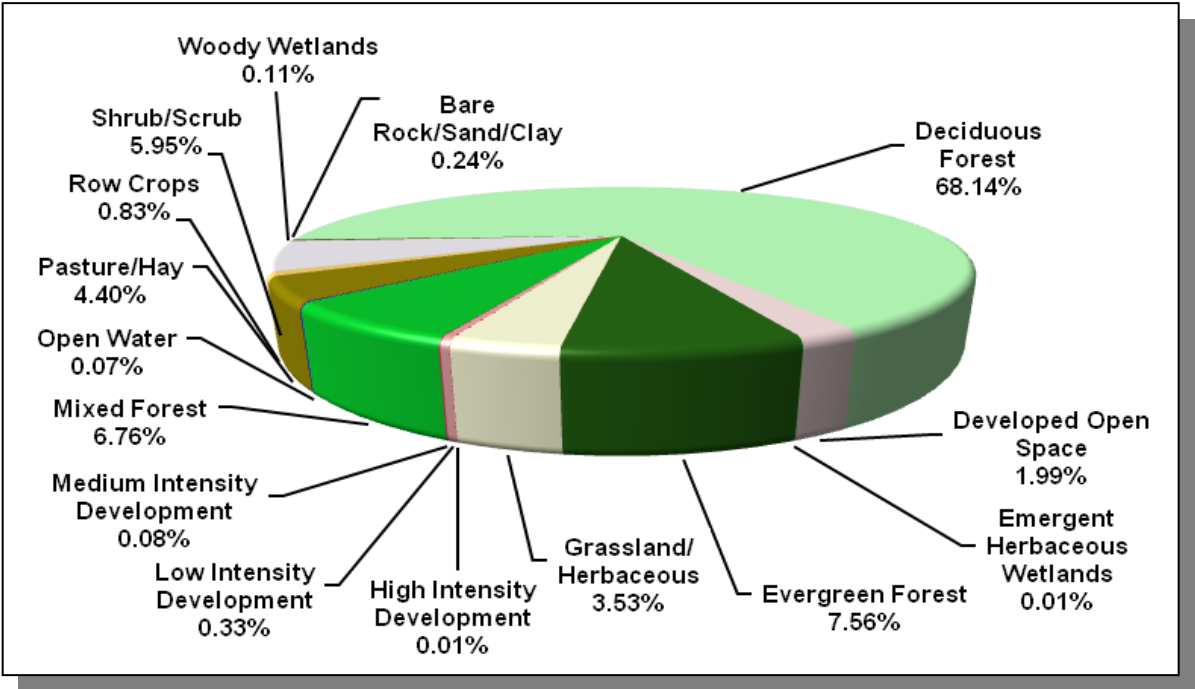


Figure 4-109. Land Use Distribution in Subwatershed 060200040301. More information is provided in Appendix IV.

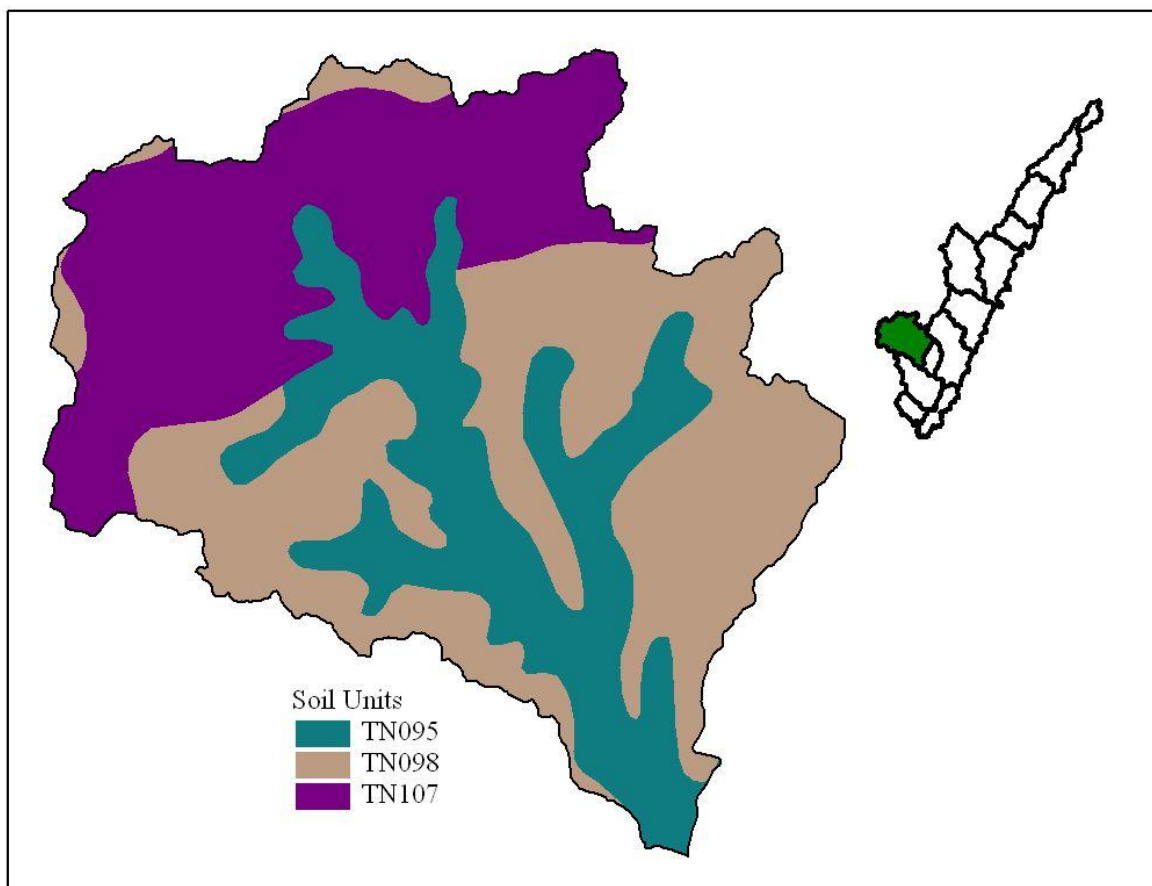


Figure 4-110. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040301.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	B	2.35	5.12	Loam	0.31
TN098	1.00	C	3.98	4.82	Loam	0.32
TN107	1.00	C	6.34	4.84	Loam	0.28

Table 4-55. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040301. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			% of County in Watershed	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Grundy	13,362	14,012	14,332	7.08	946	992	1,015	7.30
Marion	24,860	26,674	27,776	7.57	1,881	2,018	2,102	11.70

Table 4-56. Population Estimates in Subwatershed 060200040301.

			NUMBER OF HOUSING UNITS			
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Coalmont	Grundy	857	300	4	268	28
Gruetli-Laager	Grundy	1810	680	15	633	32
Total		2,667	980	19	901	60

Table 4-57. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 060200040301.

4.2.K.ii USGS Gaging Stations and STORET Sites.

There are no USGS continuous record gaging stations located in subwatershed 060200040301.

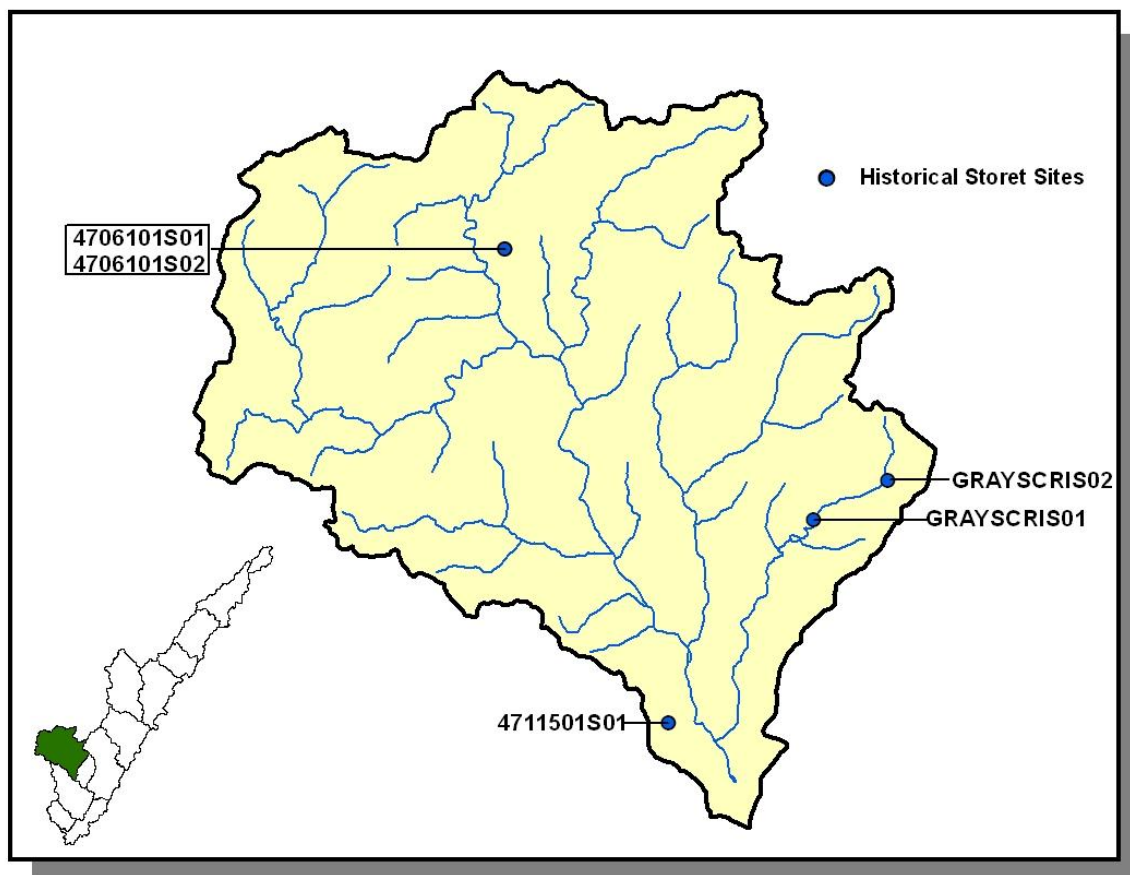


Figure 4-111. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060200040301. More information, including site names and locations, is provided in Appendix IV.

4.2.K.iii. Permitted Activities.

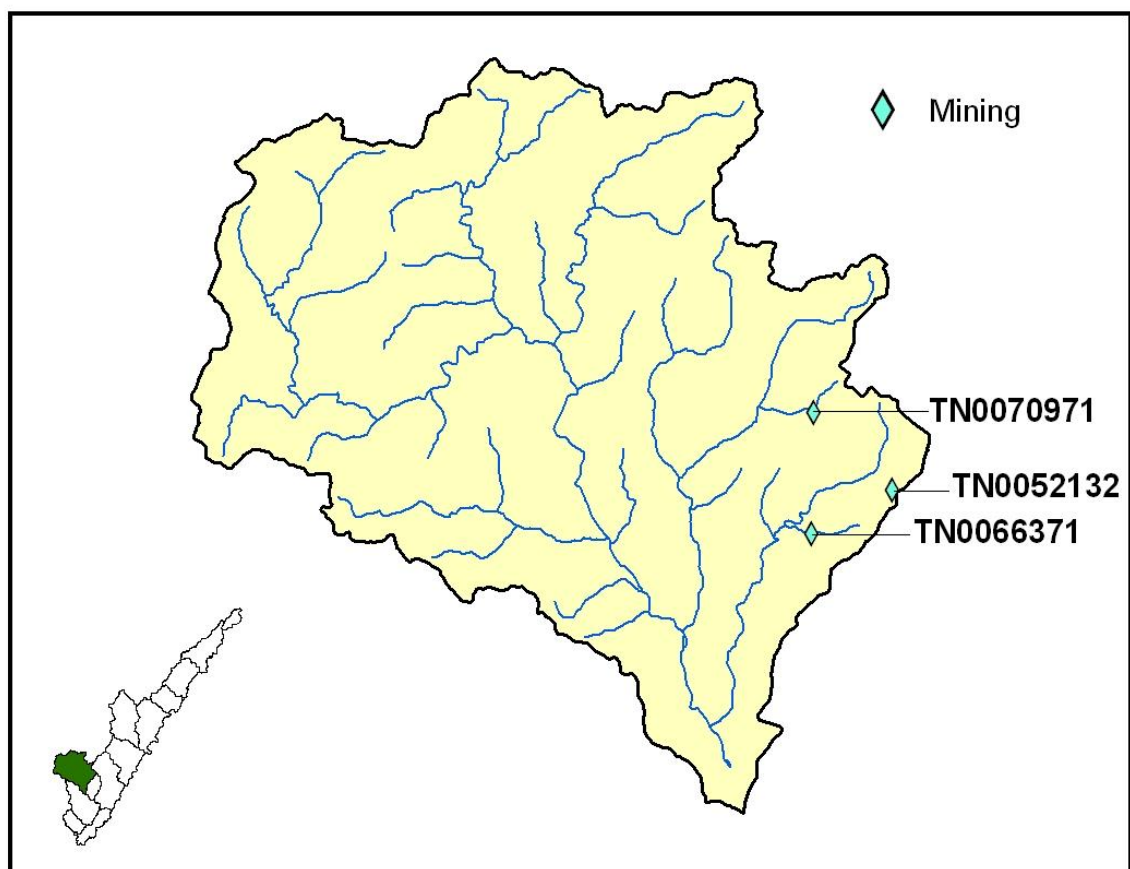


Figure 4-112. Location of Permits Issued in Subwatershed 060200040301. More information, including the names of facilities, is provided in Appendix IV.

4.2.K.iv. Nonpoint Source Contributions.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Grundy	3,276	7,673	466	68,155	1,761	
Marion	4,424	8,939	311	246	279	

Table 4-58. Summary of Livestock Count Estimates by County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Grundy	174.5	165.9	5.6	17.7

Table 4-59. Forest Acreage and Annual Removal Rates (1987-1994) by County.

CROPS	TONS/ACRE/YEAR
Other Vegetable and Truck Crop	7.28
Soybeans (Row Crops)	4.60
Corn (Row Crops)	4.17
Other (Horticultural)	2.01
Grass (Pastureland)	0.62
Grass (Hayland)	0.39
Grass Forbs Legumes Mixed (Pas	0.32
Farmsteads and Ranch Headquart	0.23
Legume Grass (Hayland)	0.19

Table 4-60. Annual Estimated Total Soil Loss in Subwatershed 060200040301

4.2.L. 060200040302 (Pocket Creek).

4.2.L.i. General Description.

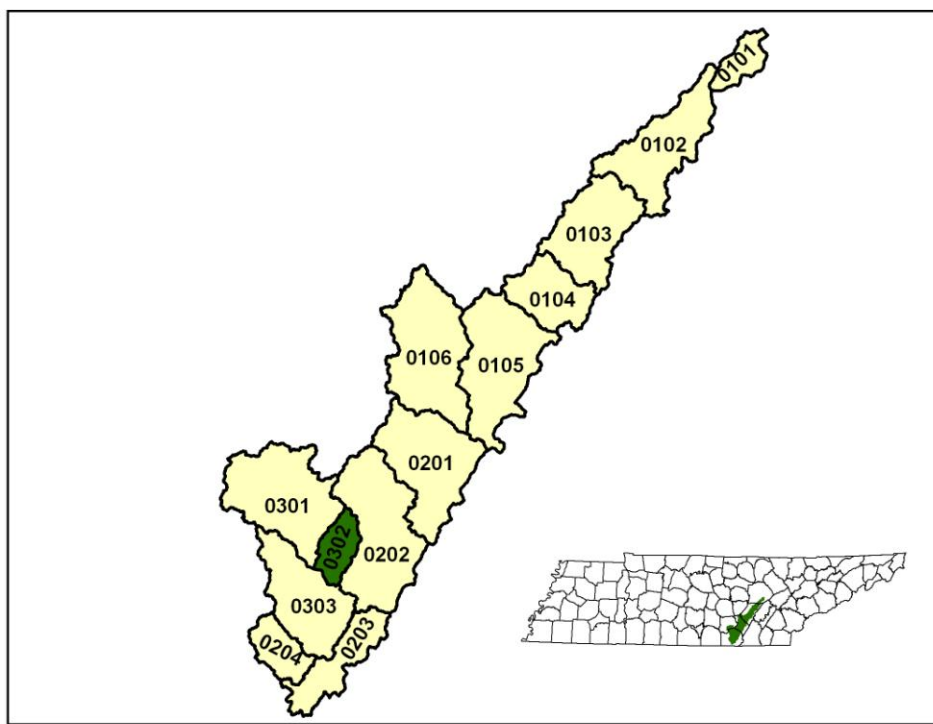


Figure 4-113. Location of Subwatershed 060200040302. All Sequatchie River HUC-12 subwatershed boundaries are shown for reference.

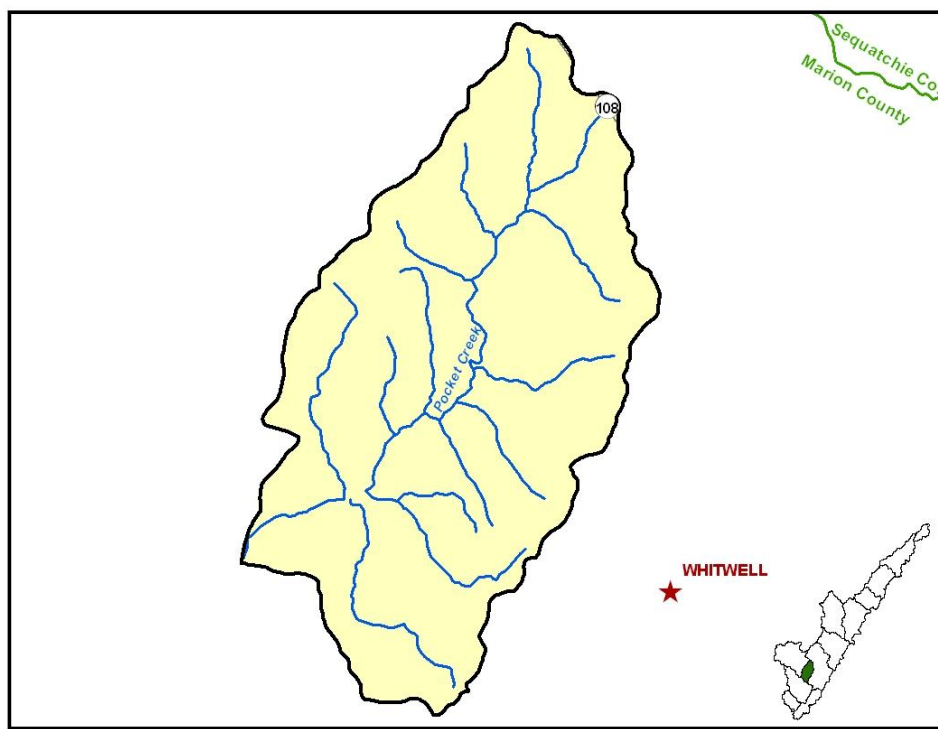


Figure 4-114. Locational Details of Subwatershed 060200040302.

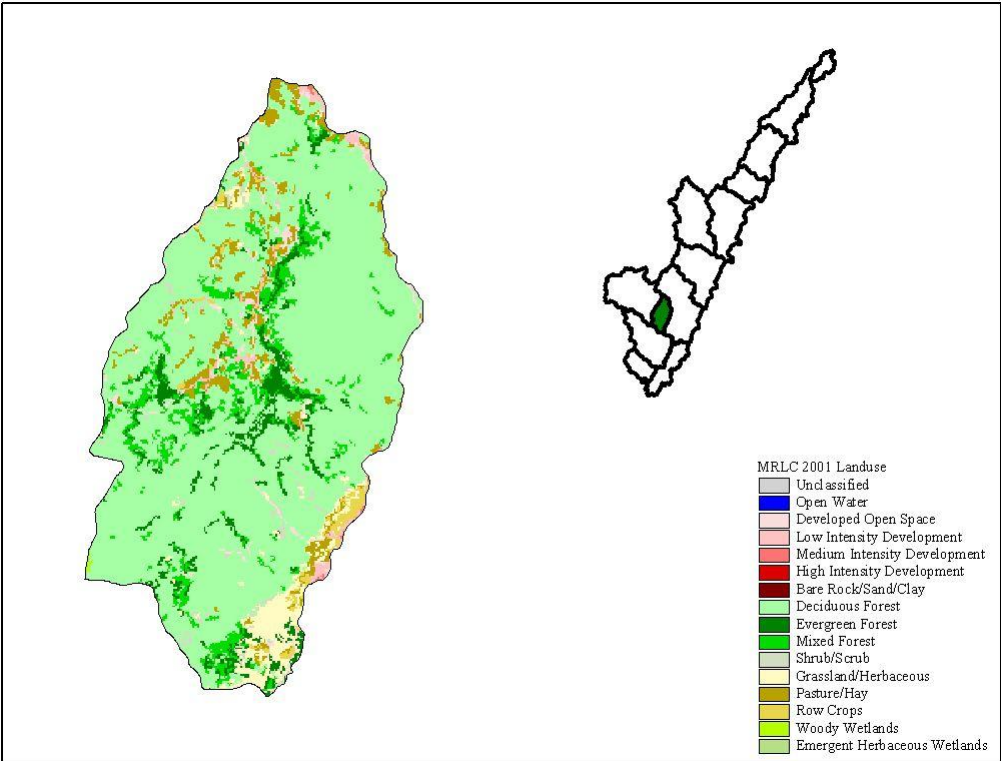


Figure 4-115. Illustration of Land Use Distribution in Subwatershed 060200040302.

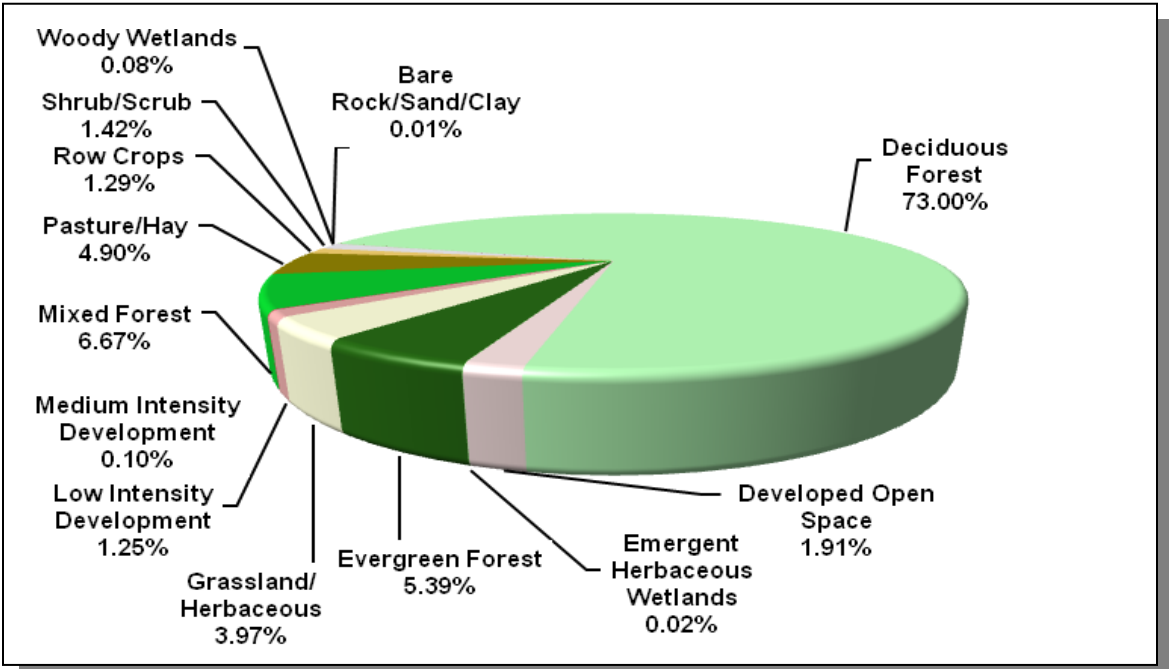


Figure 4-116. Land Use Distribution in Subwatershed 060200040302. More information is provided in Appendix IV.

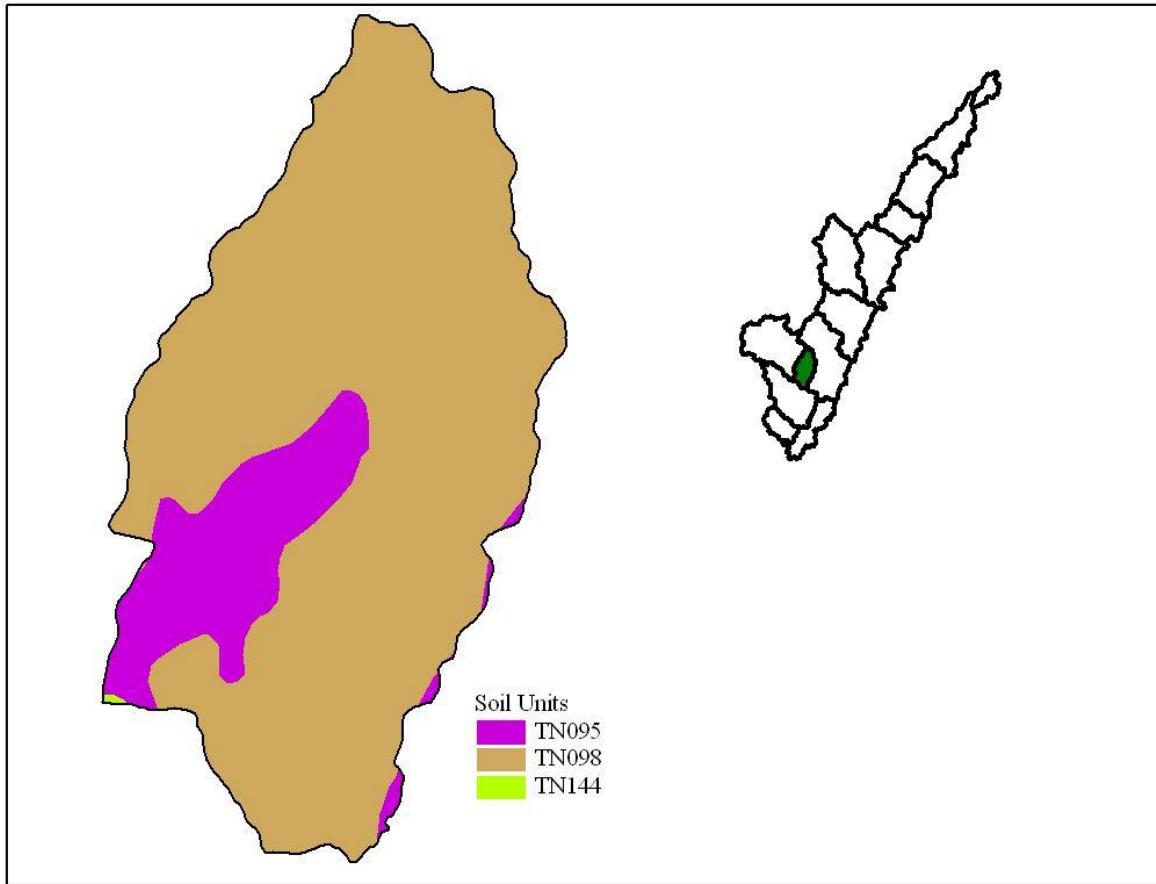


Figure 4-117. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040302.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	B	2.35	5.12	Loam	0.31
TN098	1.00	C	3.98	4.82	Loam	0.32
TN144	0.00	B	2.43	5.43	Loam	0.31

Table 4-61. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040302. The definition of "Hydrologic Group" is provided in Appendix IV.

	COUNTY POPULATION				ESTIMATED POPULATION IN WATERSHED			
County	1990	1997	2000	% of County in Watershed	1990	1997	2000	% Change (1990-2000)
Marion	24,860	26,674	27,776	3.02	750	805	838	11.70

Table 4-62. Population Estimates in Subwatershed 060200040302.

4.2.L.ii USGS Gaging Stations and STORET Sites.

There are no USGS continuous record gaging stations located in subwatershed 060200040302.

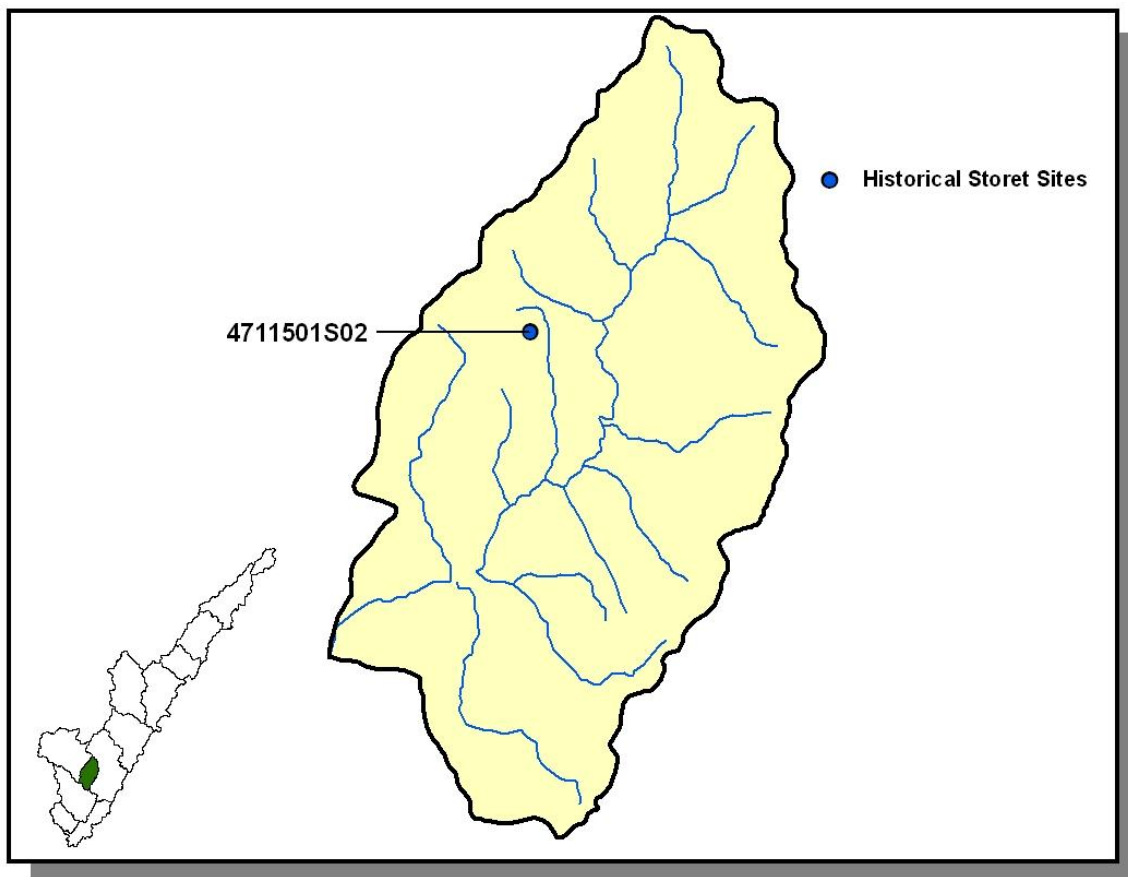


Figure 4-118. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060200040302. More information, including site names and locations, is provided in Appendix IV.

4.2.L.iii. Permitted Activities.

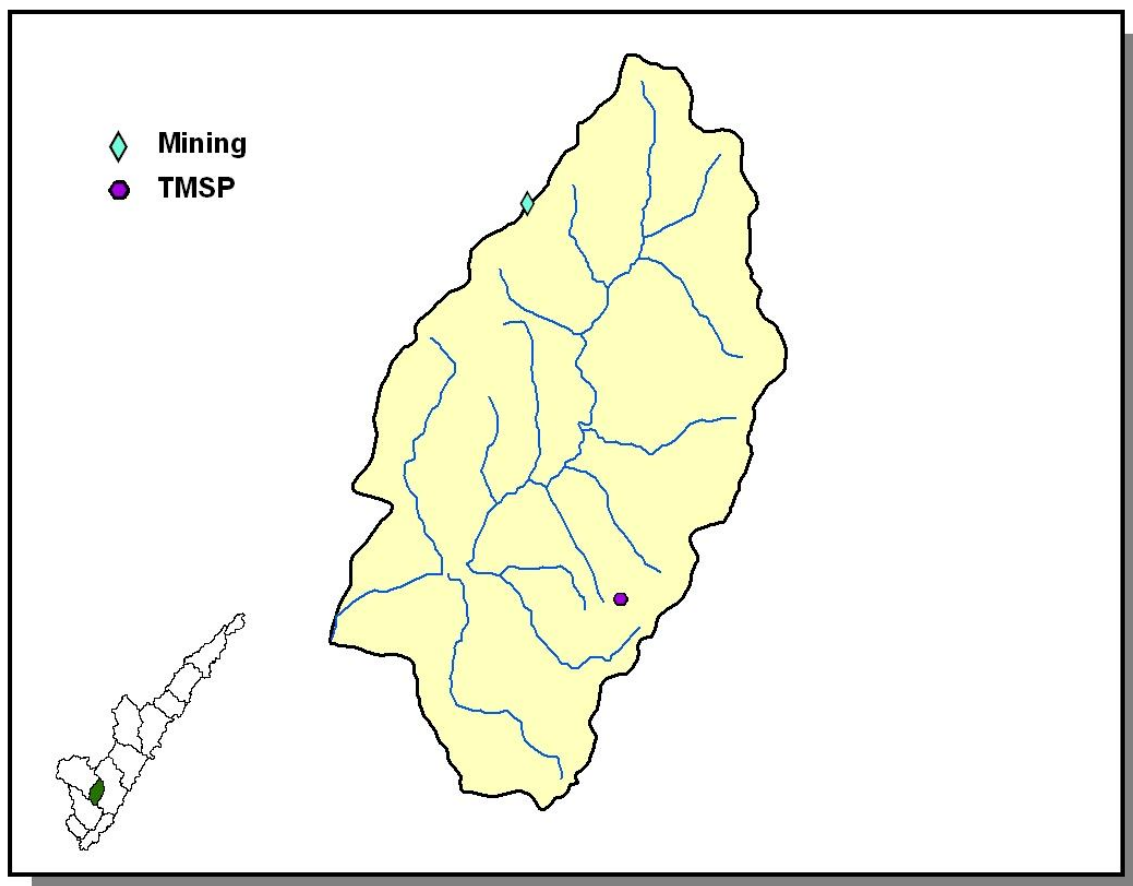


Figure 4-119. Location of Permits Issued in Subwatershed 060200040302. More information, including the names of facilities, is provided in Appendix IV.

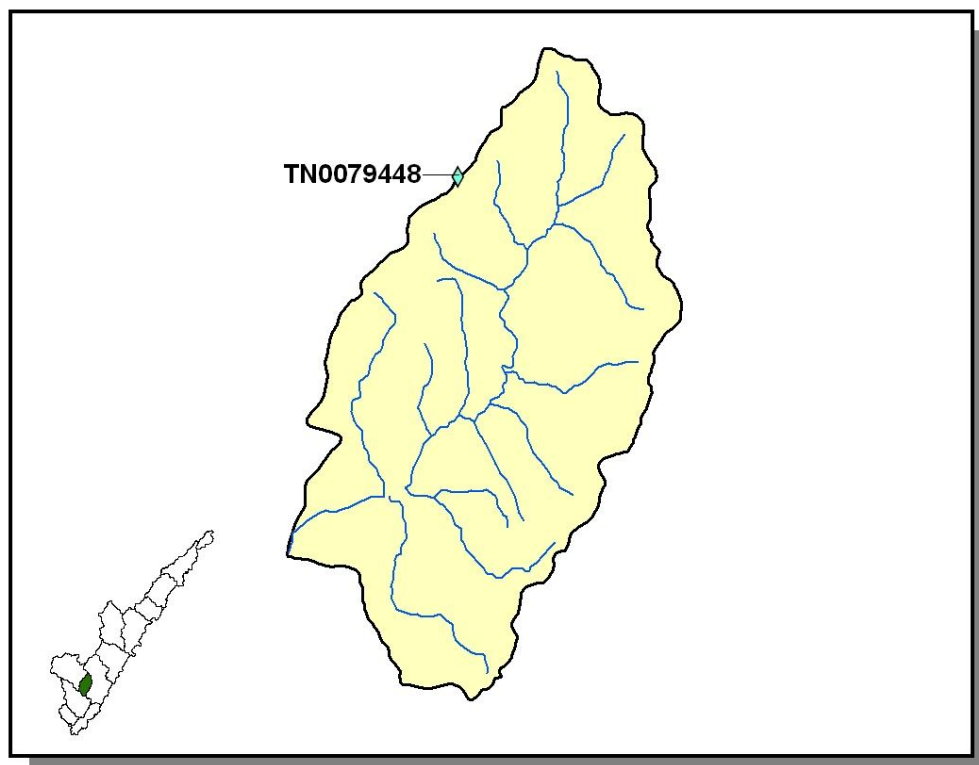


Figure 4-120. Location of Permitted Mining Facilities in Subwatershed 060200040302. More information is provided in Appendix IV.

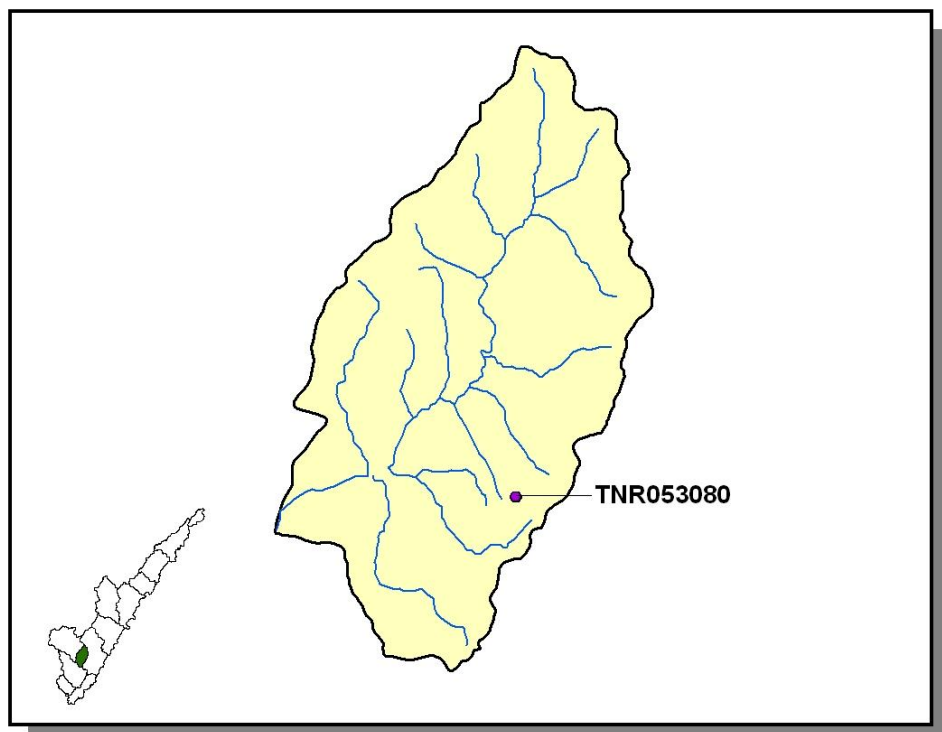


Figure 4-121. Location of TMSP (Tennessee Multi Sector Permit) Sites in Subwatershed 060200040302. More information is provided in Appendix IV.

4.2.L.iv. Nonpoint Source Contributions.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Marion	4,424	8,939	311	246	279	

Table 4-63. Summary of Livestock Count Estimates by County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

CROPS	TONS/ACRE/YEAR
Other Vegetable and Truck Crop	7.28
Soybeans (Row Crops)	4.56
Corn (Row Crops)	3.55
Grass (Pastureland)	0.62
Grass Forbs Legumes Mixed (Pastureland)	0.29
Other (Horticultural)	0.29
Farmsteads and Ranch Headquarters	0.19

Table 4-64. Annual Estimated Total Soil Loss in Subwatershed 060200040302.

4.2.M. 060200040303 (Little Sequatchie River, Lower).

4.2.M.i. General Description.

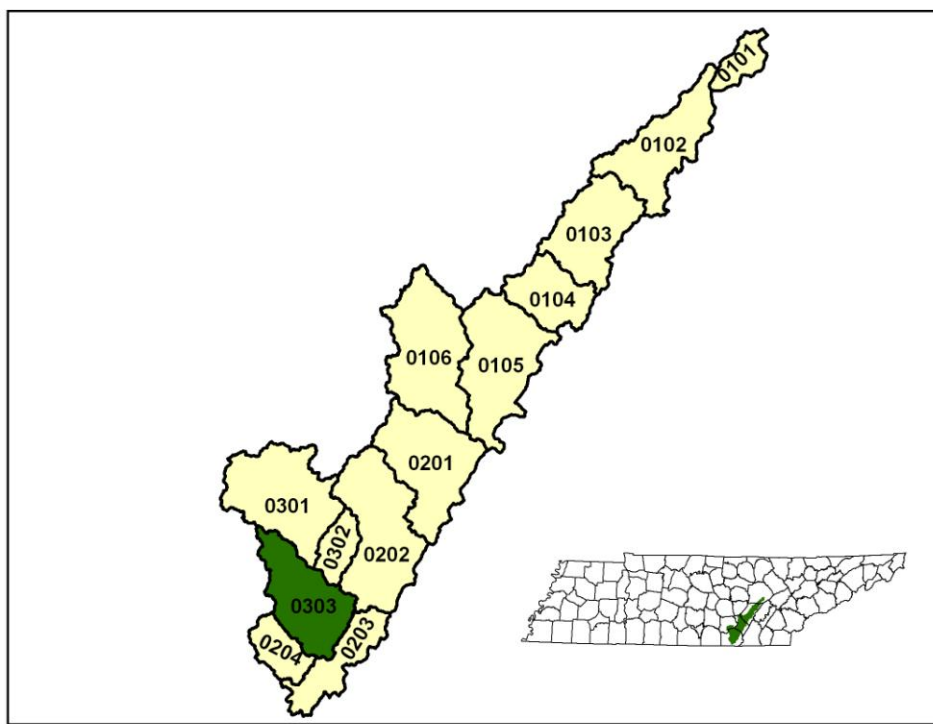


Figure 4-122. Location of Subwatershed 060200040303. All Sequatchie River HUC-12 subwatershed boundaries are shown for reference.

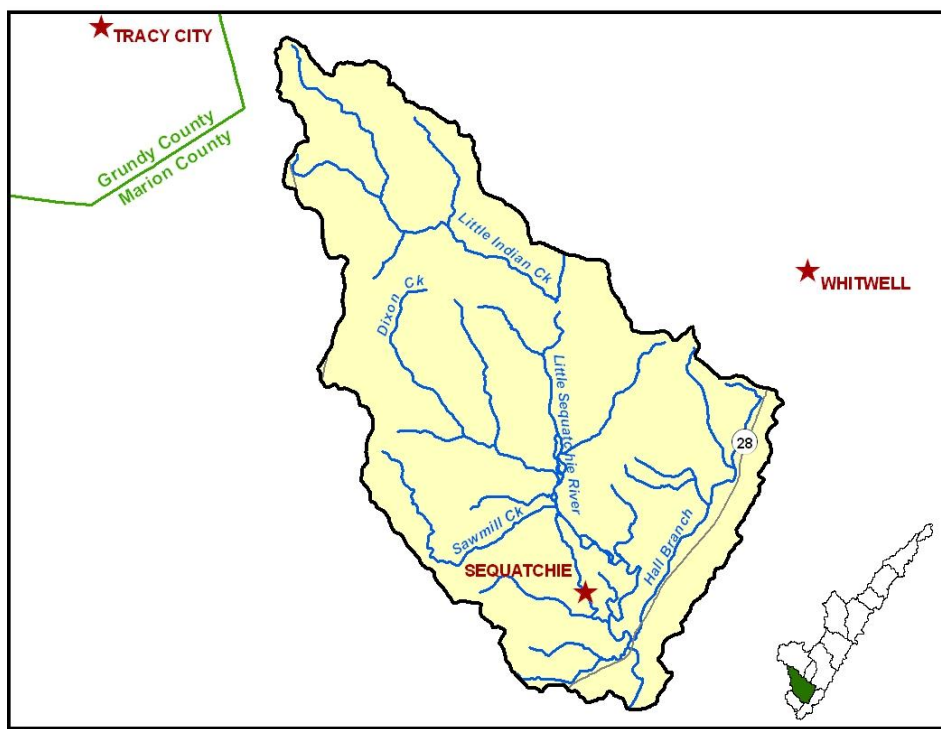


Figure 4-123. Locational Details of Subwatershed 060200040303.

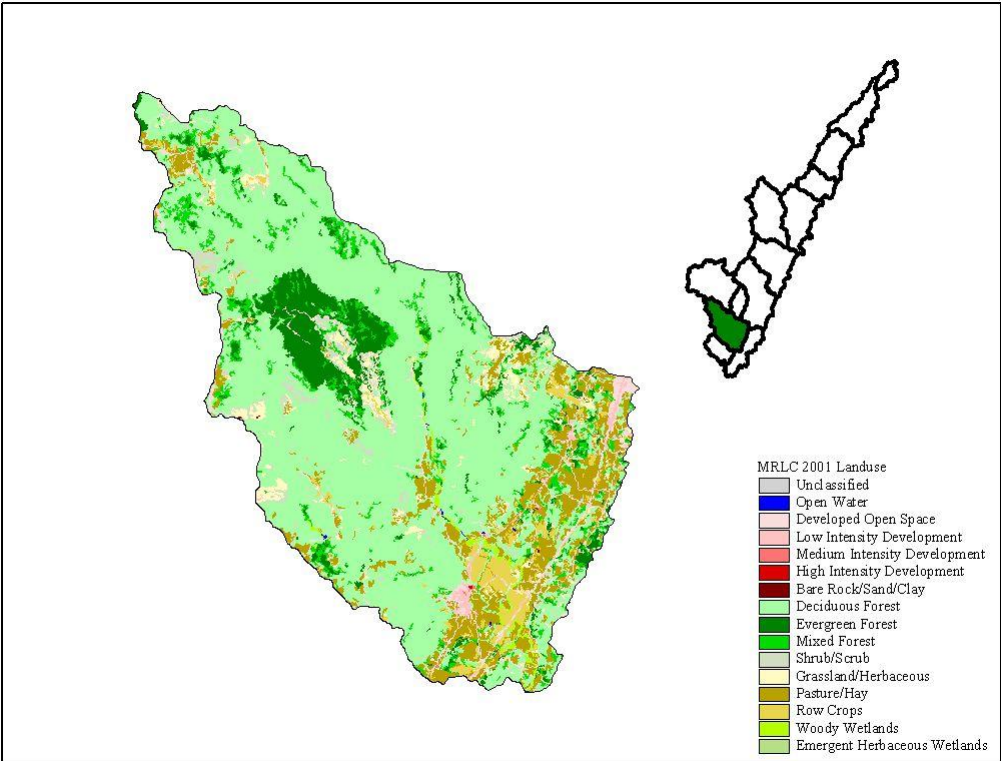


Figure 4-124. Illustration of Land Use Distribution in Subwatershed 060200040303.

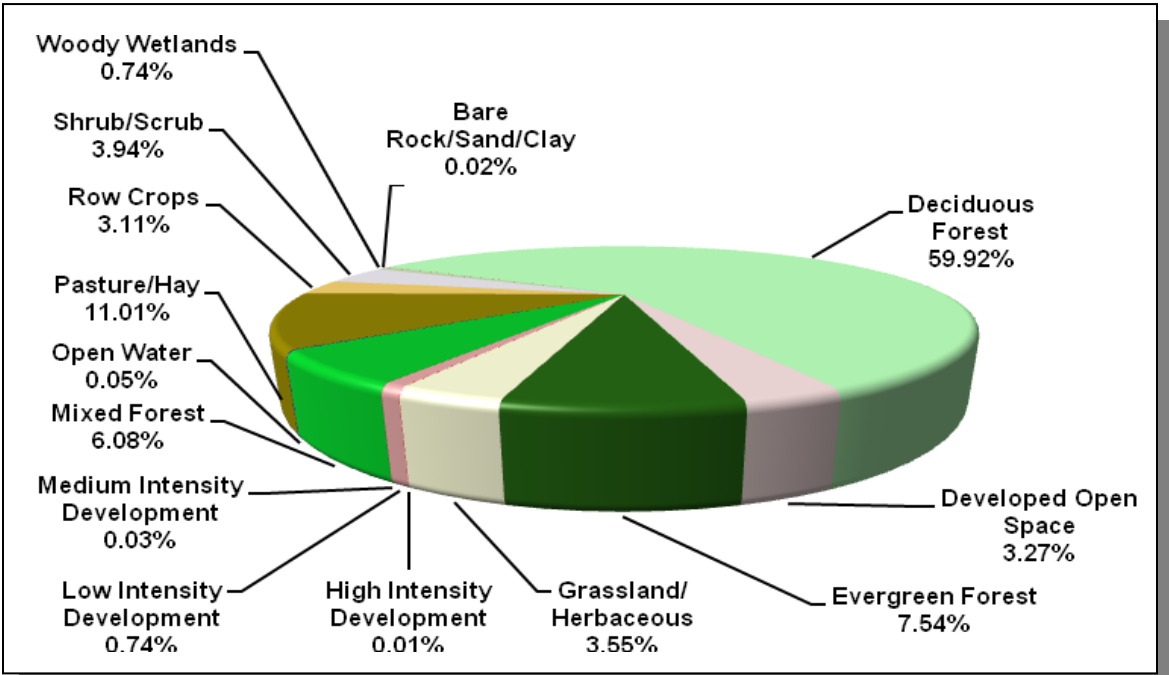


Figure 4-125. Land Use Distribution in Subwatershed 060200040303. More information is provided in Appendix IV.

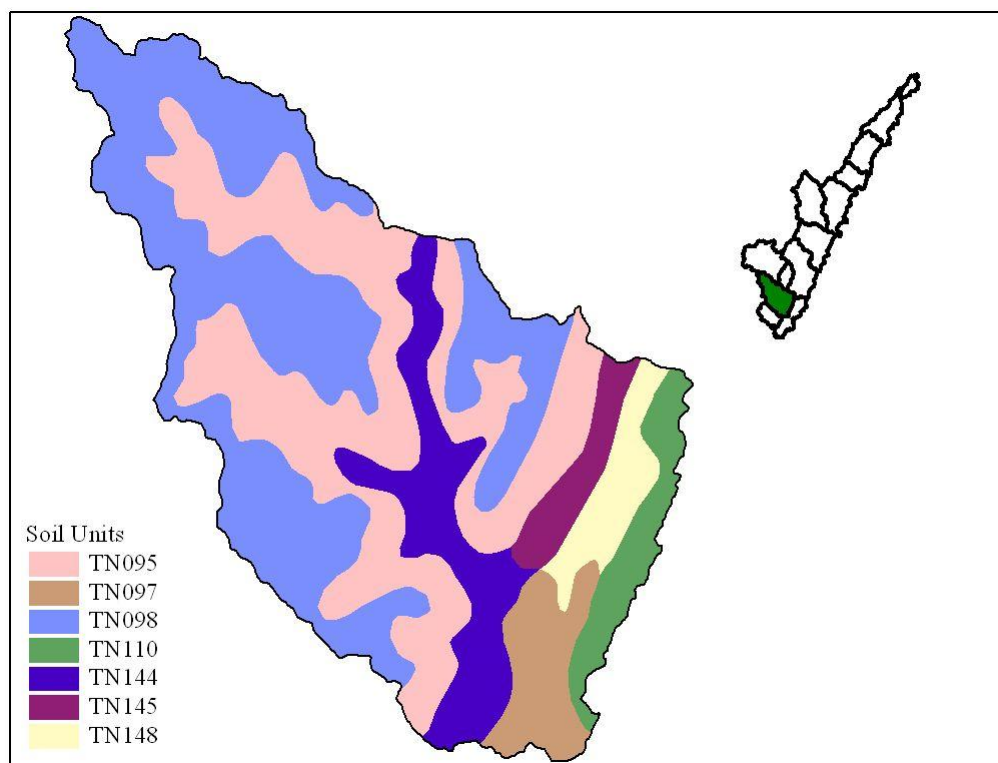


Figure 4-126. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040303.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN095	0.00	B	2.35	5.12	Loam	0.31
TN097	0.00	B	1.62	5.55	Loam	0.32
TN098	1.00	C	3.98	4.82	Loam	0.32
TN110	0.00	B	2.22	4.96	Loam	0.31
TN144	0.00	B	2.43	5.43	Loam	0.31
TN145	0.00	B	1.84	4.83	Loam	0.27
TN148	5.00	B	1.37	4.84	Loam	0.28

Table 4-65. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 060200040303. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			% of County in Watershed	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Marion	24,860	26,674	27,776	9.58	2,382	2,556	2,662	11.80

Table 4-66. Population Estimates in Subwatershed 060200040303.

			NUMBER OF HOUSING UNITS			
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Jasper	Marion	2,780	1,199	966	225	8

Table 4-67. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 060200040303.

4.2.M.ii USGS Gaging Stations and STORET Sites.

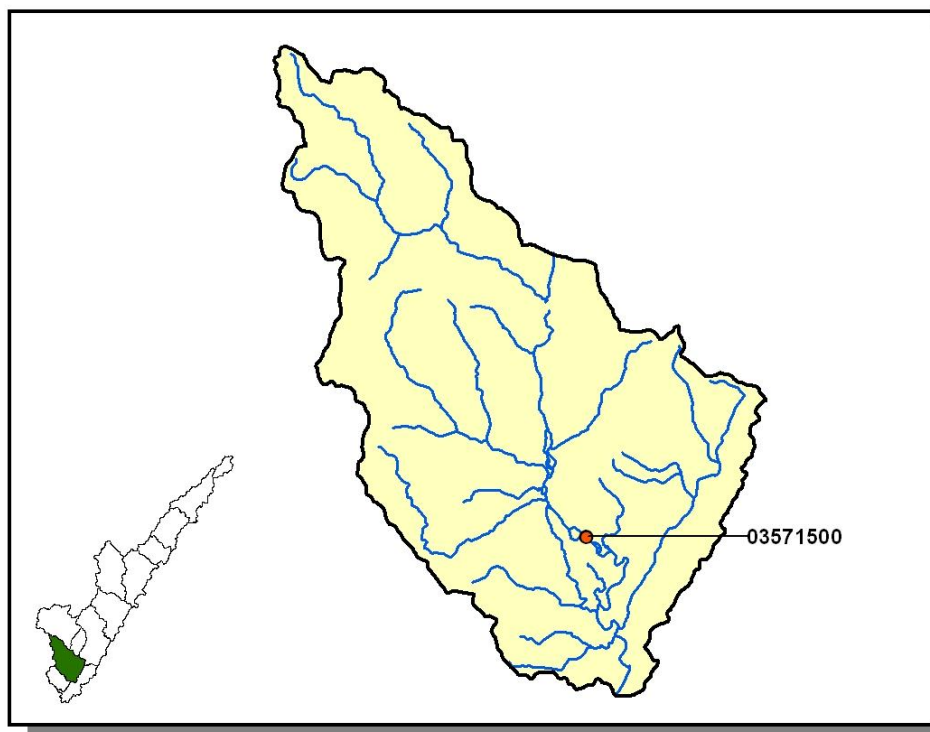


Figure 4-127. Location of USGS Continuous Record Gaging Stations in Subwatershed 060200040303. More information is provided in Appendix IV.

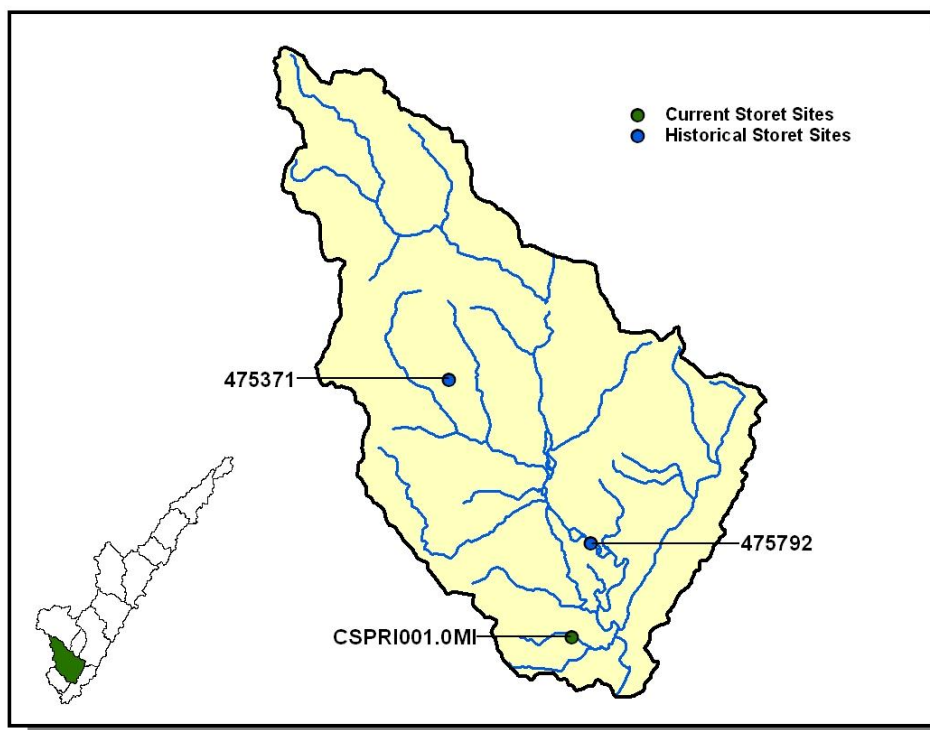


Figure 4-128. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 060200040303. More information, including site names and locations, is provided in Appendix IV.

4.2.M.iii. Permitted Activities.

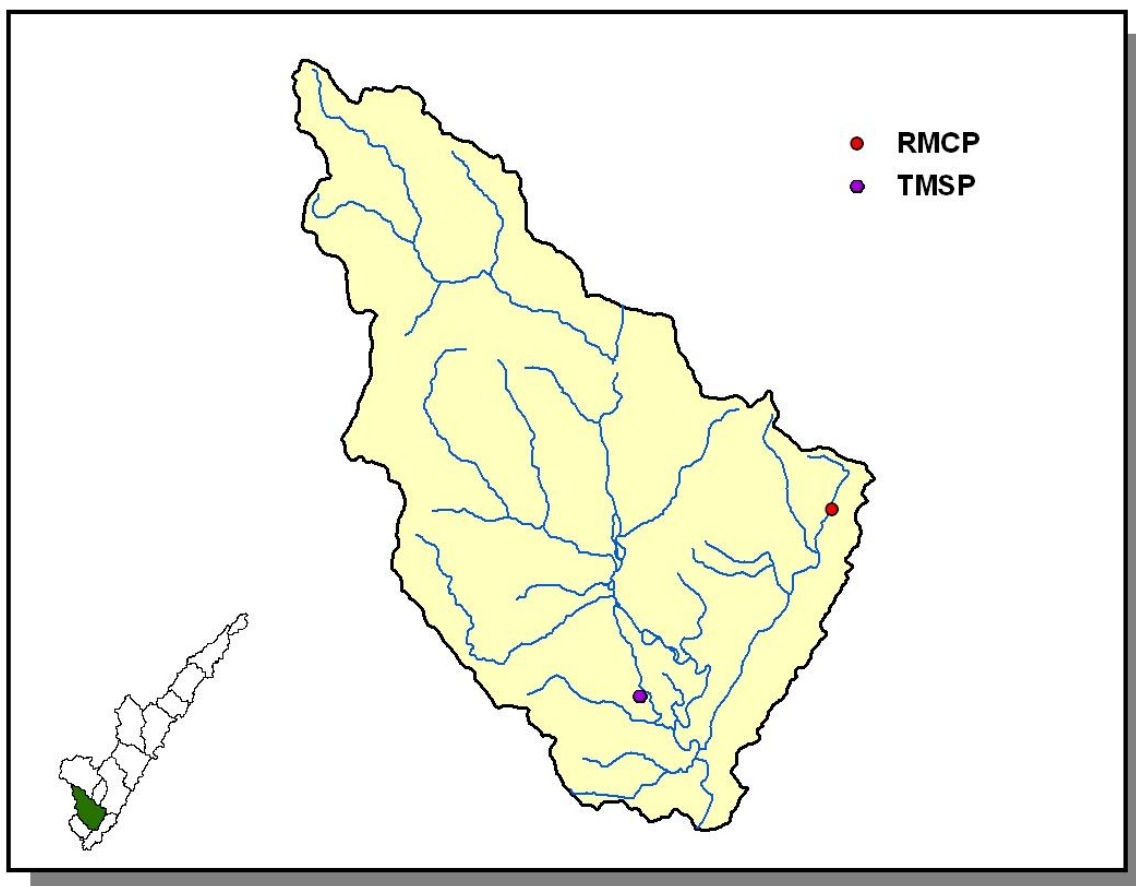


Figure 4-129. Location of Permits Issued in Subwatershed 060200040303. More information, including the names of facilities, is provided in Appendix IV.

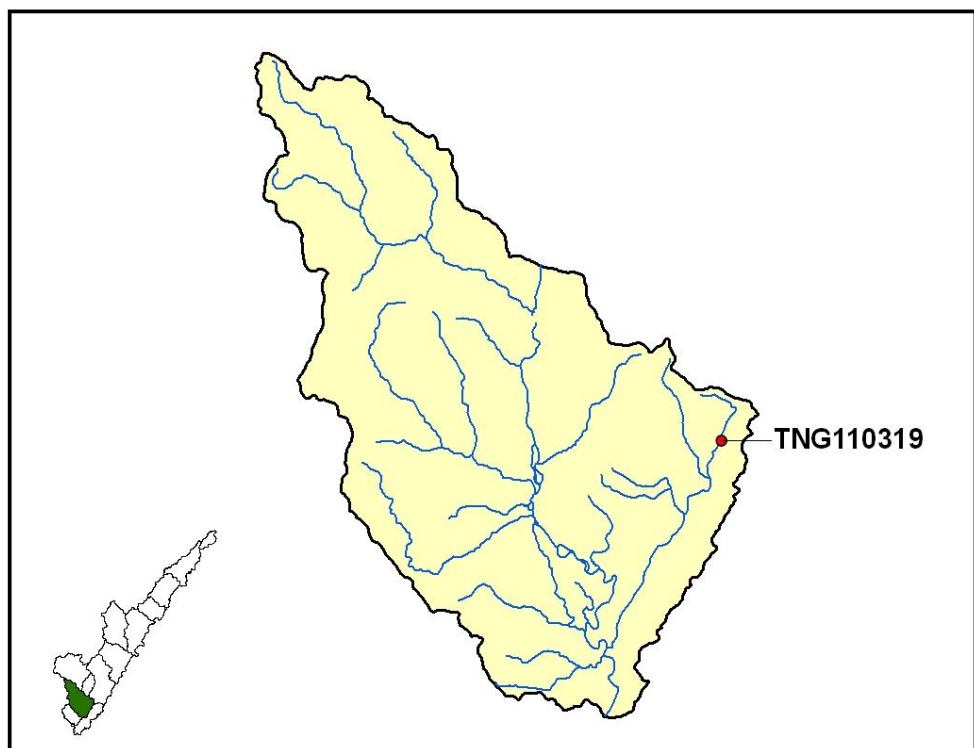


Figure 4-130. Location of RMCP (Ready Mix Concrete Plant) facilities in Subwatershed 060200040303. More information, including the names of facilities, is provided in Appendix IV.

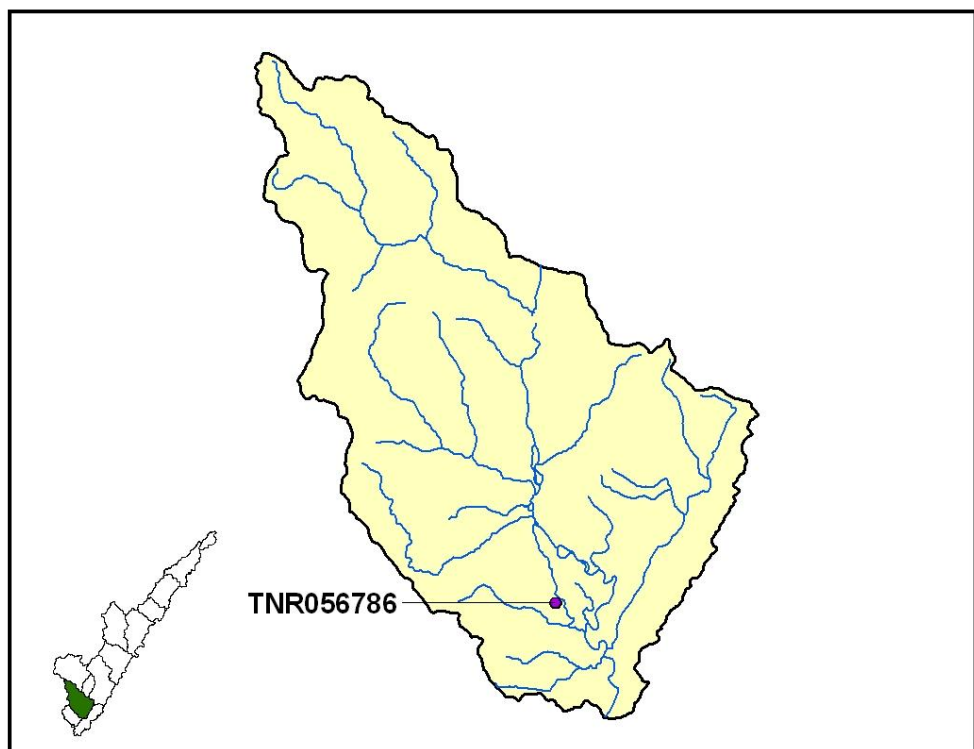


Figure 4-131. Location of TMSP (Tennessee Multi Sector Permit) Sites in Subwatershed 060200040303. More information is provided in Appendix IV.

4.2.M.iv. Nonpoint Source Contributions.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Marion	4,424	8,939	311	246	279	

Table 4-68. Summary of Livestock Count Estimates by County. According to the 1997 Census of Agriculture (<http://www.agcensus.usda.gov/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

CROPS	TONS/ACRE/YEAR
Other Vegetable and Truck Crop	7.28
Soybeans (Row Crops)	4.56
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Grass (Pastureland)	0.62
Grass Forbs Legumes Mixed (Pastureland)	0.29
Other (Horticultural)	0.29
Farmsteads and Ranch Headquarters	0.19

Table 4-69. Annual Estimated Total Soil Loss in Subwatershed 060200040303.